D 58/draft/map supp.

MAP SUPPLEMENT

WILDERNESS PLANNING AMENDMENT/ ENVIRONMENTAL IMPACT STATEMENT FOR THE DILLON RESOURCE AREA

DRAFT

Department of the Interior
Bureau of Land Management
May 1982

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JUN 11 1982

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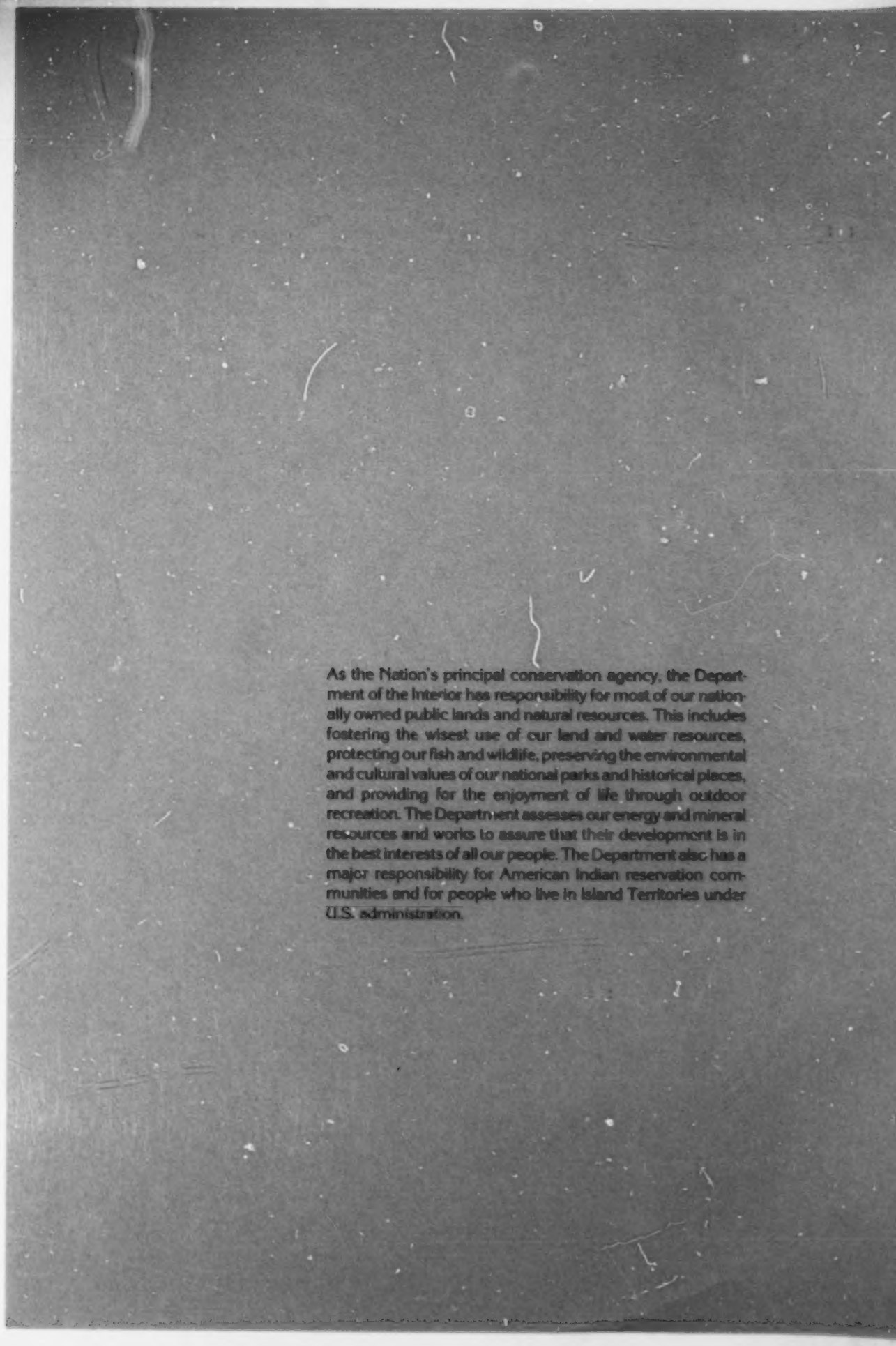

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

INTRODUCTION

The maps in this supplement show the ownership of land, the condition and location of resources, and the alternatives considered for each of the eight Wilderness Study Areas (WSAs) discussed in the Draft Dillon Wilderness Planning Amendment/EIS. The location of these WSAs is shown on the location map.

In order to facilitate the analysis of individual WSAs, the maps in this supplement are grouped so that all maps for a particular WSA appear together

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Location

Regional Wilderness Opportunities

Ruby Mountains WSA, MT-076-001
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- Geologic Map of the Northern Ruby Range
- Mining Claims and Mineral Leases
- Mineral Potential
- Timber Management
- Alternatives

Blacktail Mountains WSA, MT-076-002
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- General Geologic Map
- Generalized Geologic Structure
- Mining Claims and Mineral Leases
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- Alternatives

East Fork of Blacktail Deer Creek WSA, MT-076-007
- Land Status
- Developments and Allotments
- Ecotypes
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- Generalized Geology
- Regional Geology
- Mining Claims and Mineral Leases
- Timber Management
- Alternatives

Hidden Pasture Creek WSA, MT-076-022
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- Geologic Sketch of the Southern Tendoy Mountains
- Mining Claims and Mineral Leases
- Alternatives

Bell and Limekiln Canyons WSA, MT-076-026
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- Geologic Sketch of the Northern Tendoy Mountains
- Mining Claims and Mineral Leases
- Timber Management
- Alternatives

Henneberry Ridge WSA, MT-076-028
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- Geologic Map of the Bannack-Grayling Area
- Mining Claims and Mineral Leases
- Mineral Potential
- Alternatives

Farlin Creek WSA, MT-076-034
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- General Geologic Map of the Polaris Area
- Mining Claims and Mineral Leases
- Mineral Potential
- Timber Management
- Alternatives

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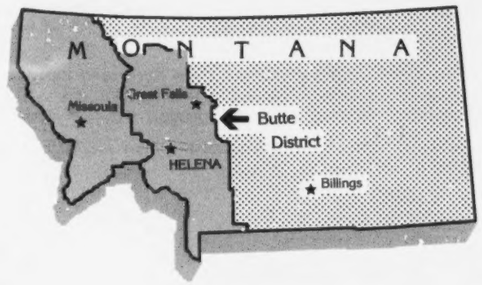
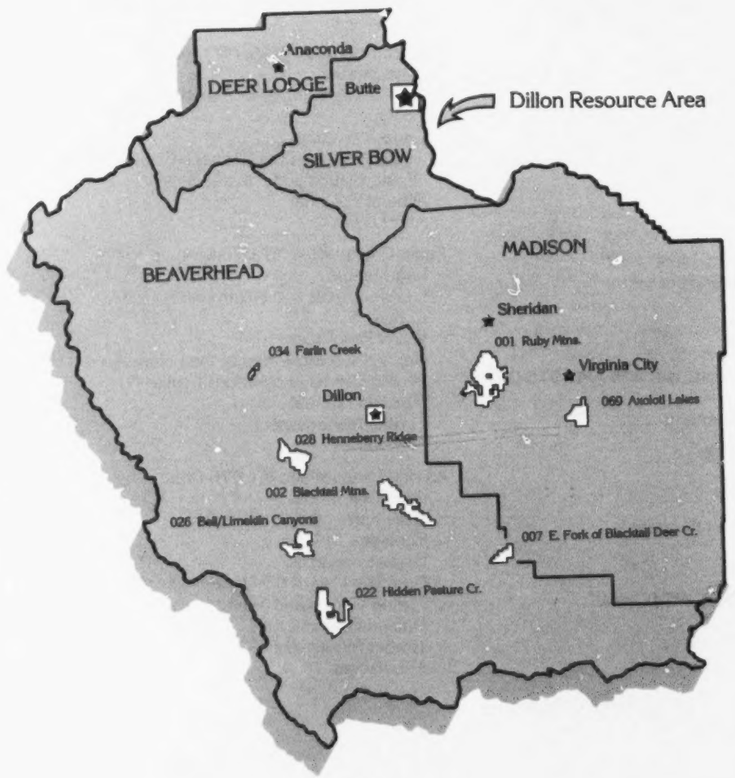
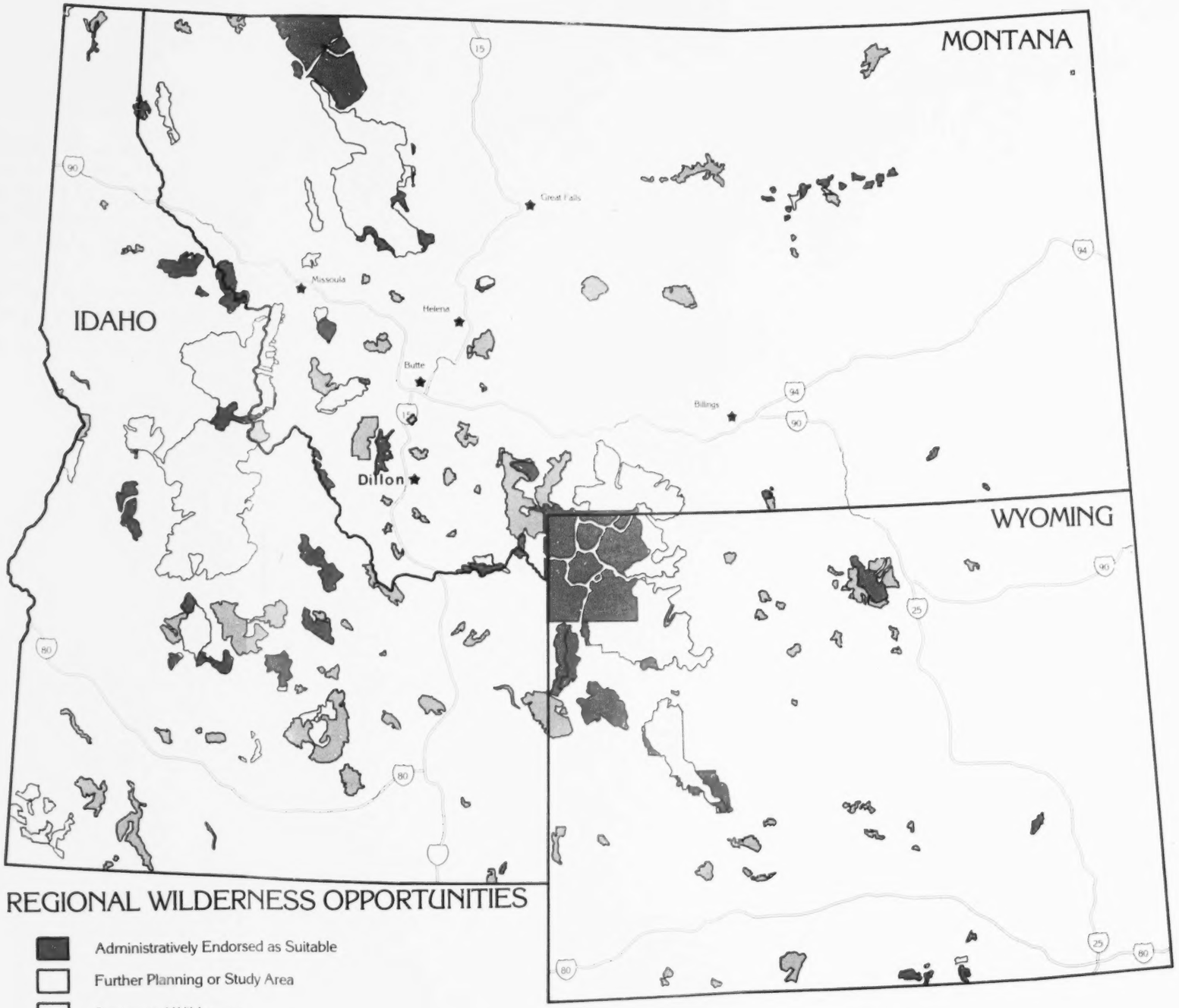
- Land Status
- Developments and Allotments
- Ecotypes
- Visual Resources
- Geologic Map of the Upper Alder Gulch Area
- Mining Claims and Mineral Leases
- Mineral Potential
- Timber Management
- Alternatives



Location Map
Dillon Wilderness Planning Amendment/EIS
for the Dillon Resource Area





REGIONAL WILDERNESS OPPORTUNITIES

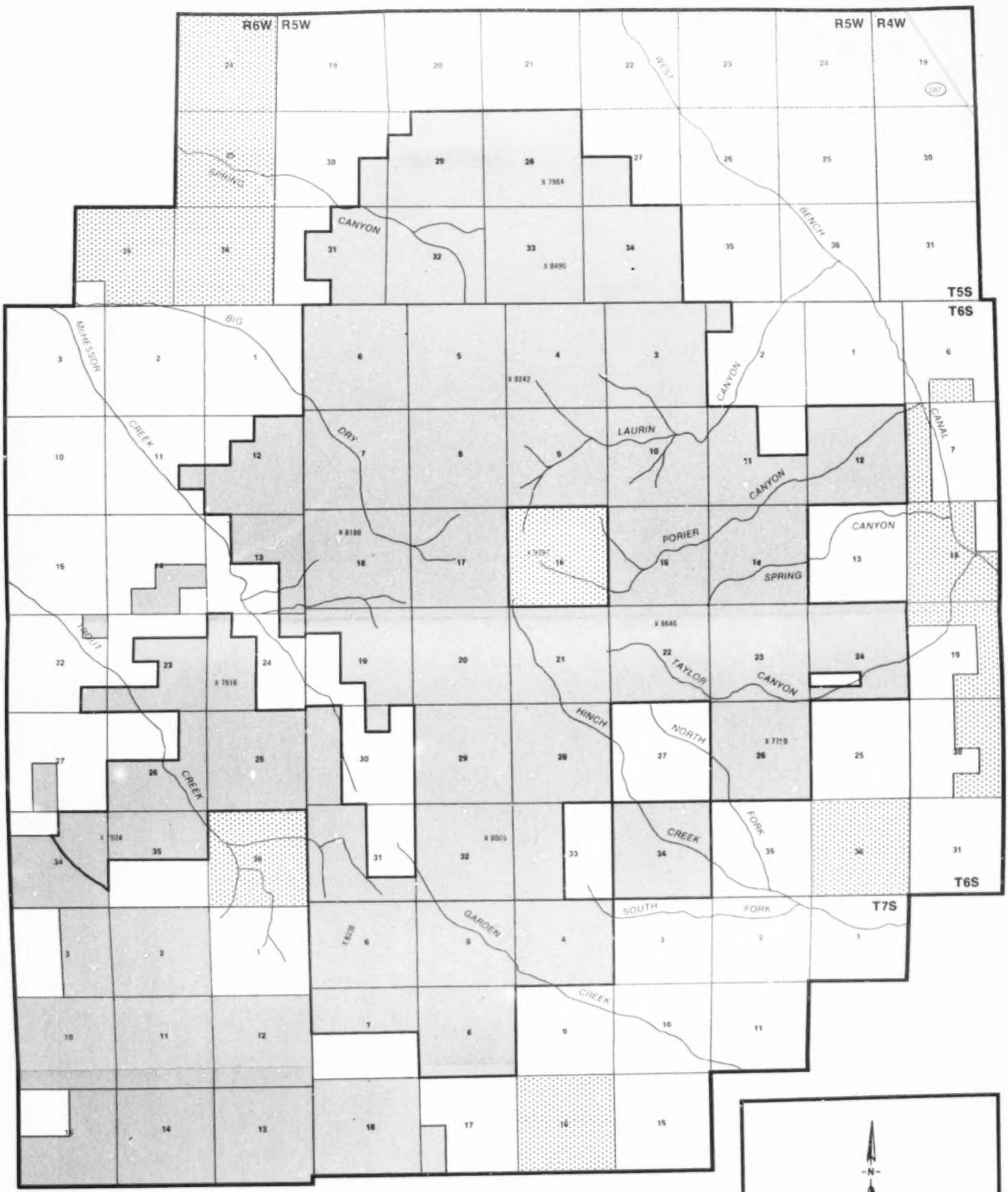
Administratively Endorsed as Suitable

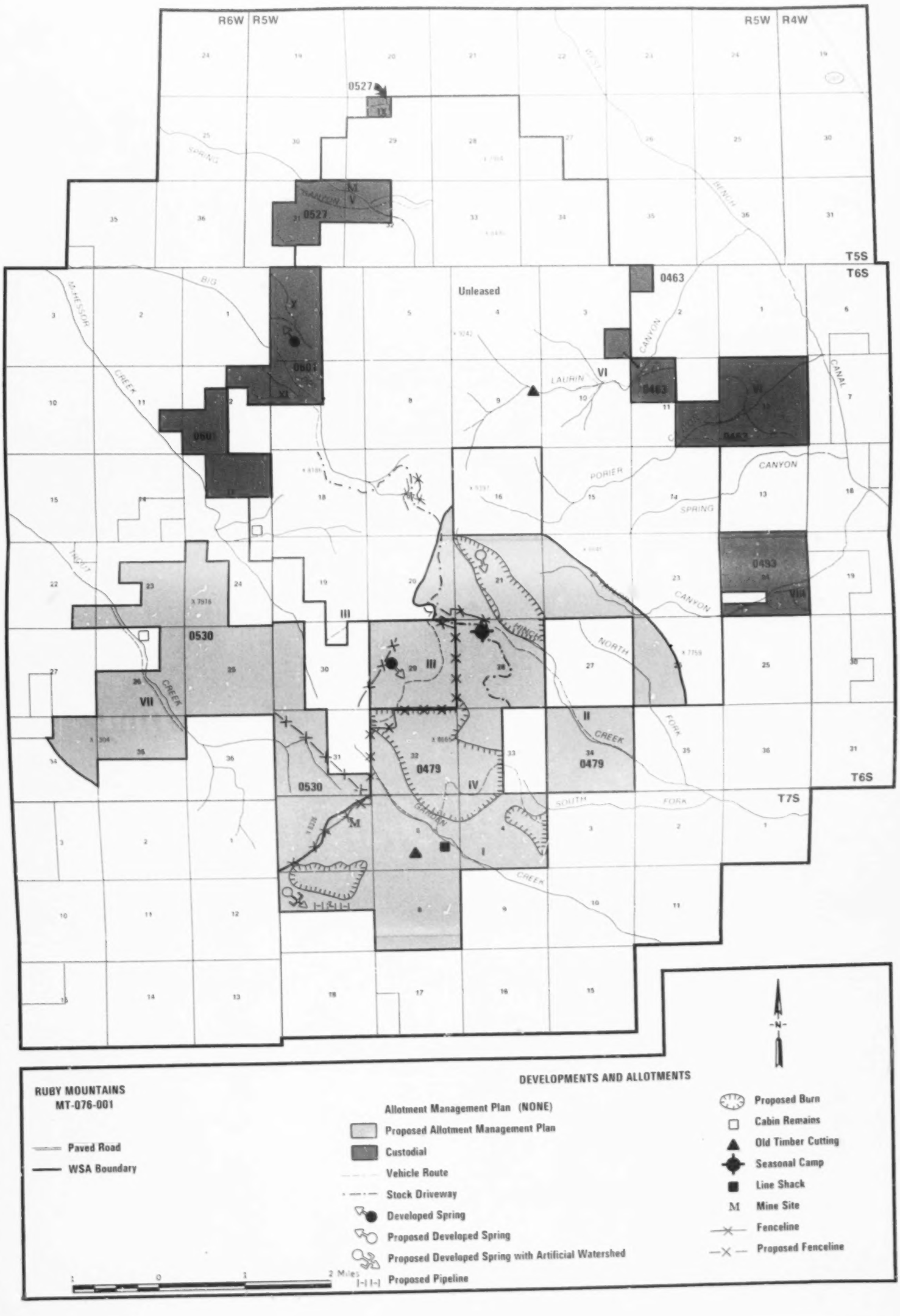
Further Planning or Study Area

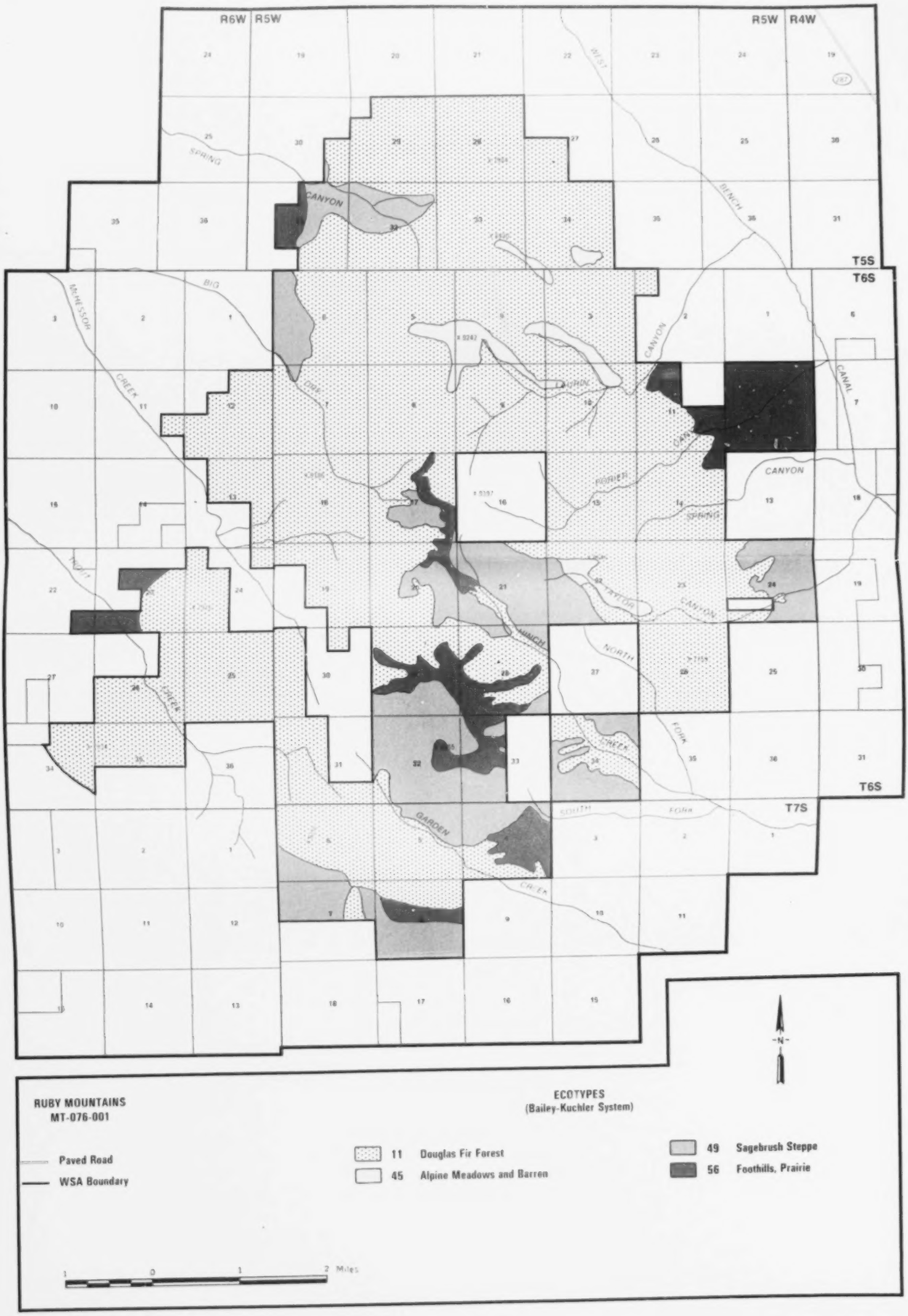
Designated Wilderness

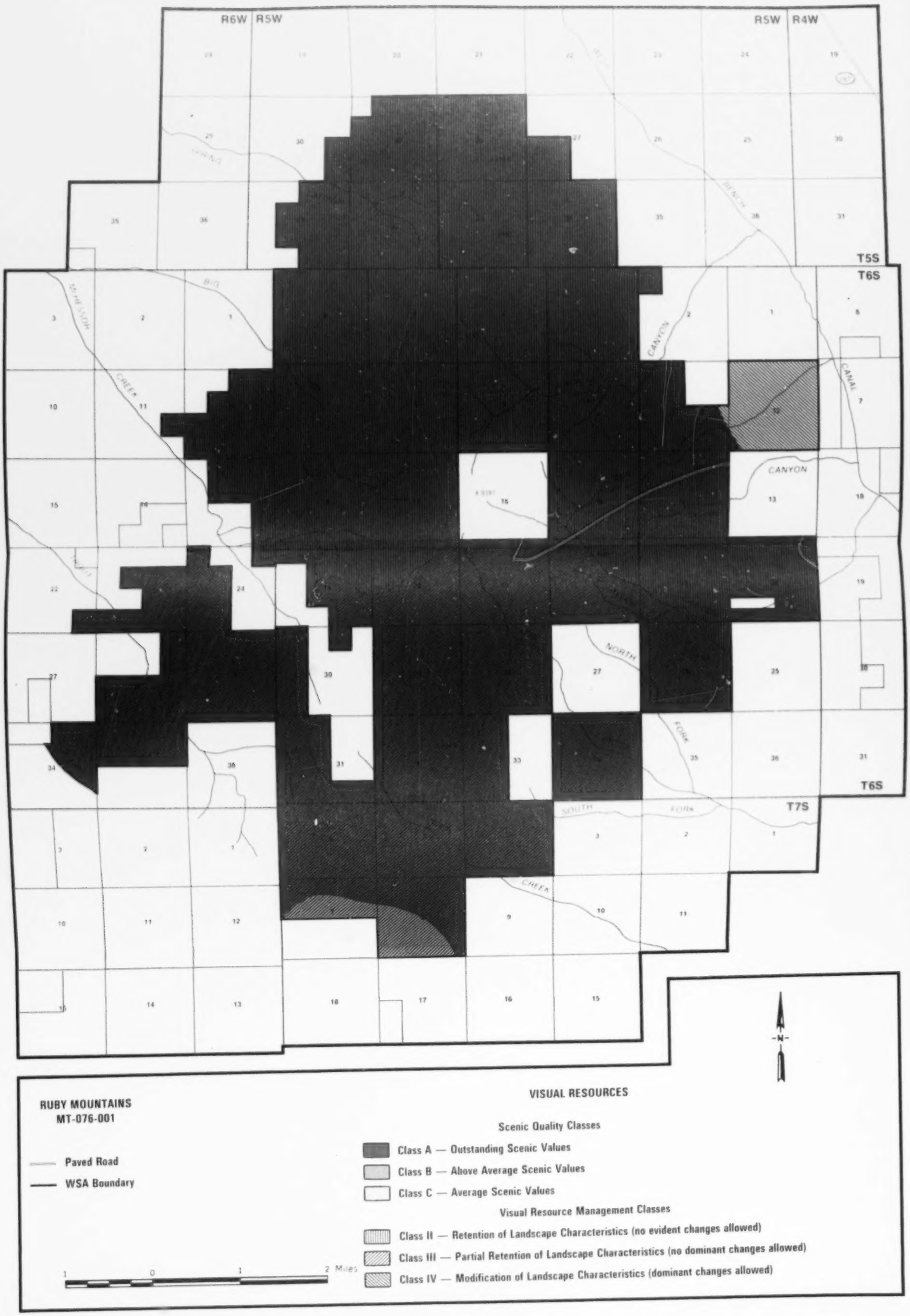
1 inch : 75 miles

Ruby Mountains WSA
MT-076-001

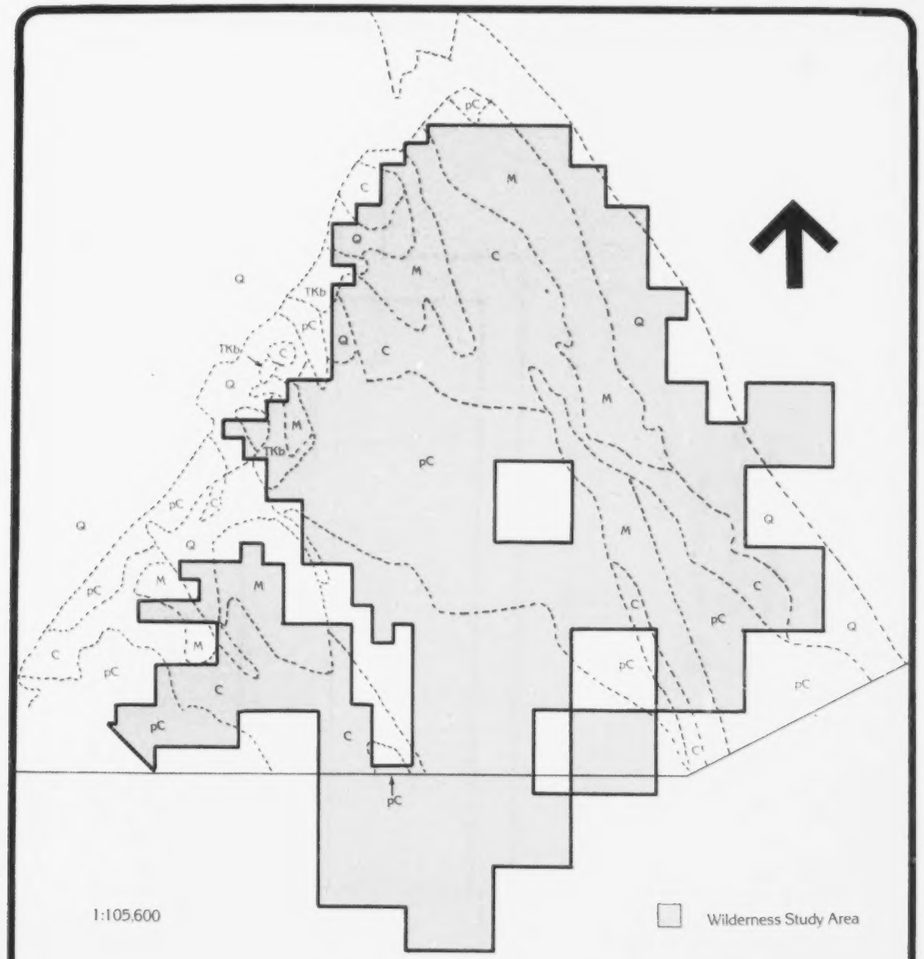

R6W
R5W
R5W
R4W
T5S
T6S
T6S
T7S
BIG
SPRING
CANYON
WEST
BENCH
MATHESSOR
CREEK
DRY
LAURIN
CANYON
CANAL
PORIER
SPRING
CANYON
TROUT
CREEK
TAYLOR
CANYON
HINCH
NORTH
CREEK
FORK
GARDEN
CREEK
SOUTH
FORK
X 7964
X 8490
X 9242
X 8186
X 8646
X 7916
X 7809
X 8869
X 8538
X 7904
X 7719
RUBY MOUNTAINS
MT-076-001
Paved Road
WSA Boundary
LAND STATUS
State
BLM
Private
-N-
1 0 1 2 Miles


R6W R5W
R5W R4W
T5S
T6S
T7S
0527
0527
0463
Unleased
0601
0601
0463
0463
0493
0530
0530
0479
0479
VII
III
IV
II
I
VI
VI
VIII
M
M
BIG
CREEK
CANYON
SPRING
PORIER
CANYON
CANYON
NORTH
FORK
SOUTH
FORK
CREEK
CANAL
LAURIN
GRIMSON
CREEK
RUBY MOUNTAINS
MT-076-001
Paved Road
WSA Boundary
DEVELOPMENTS AND ALLOTMENTS
Allotment Management Plan (NONE)
Proposed Allotment Management Plan
Custodial
Vehicle Route
Stock Driveway
Developed Spring
Proposed Developed Spring
Proposed Developed Spring with Artificial Watershed
Proposed Pipeline
Proposed Burn
Cabin Remains
Old Timber Cutting
Seasonal Camp
Line Shack
Mine Site
Fenceline
Proposed Fenceline
N
0 1 2 Miles

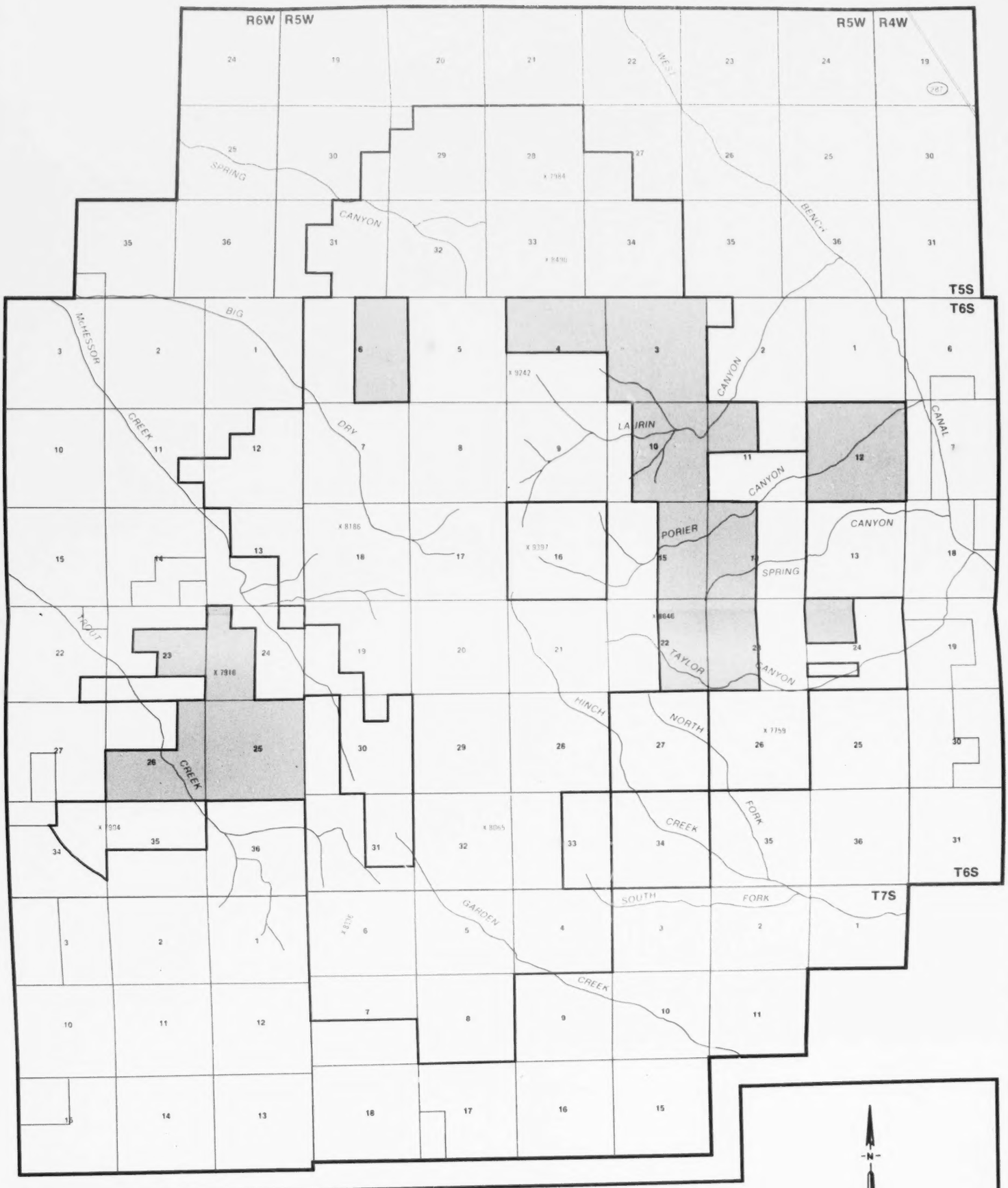

R6W
R5W
R5W
R4W
T5S
T6S
T6S
T7S
SPRING
CANYON
BIG
BRUNESSON
CREEK
CANYON
CANAL
CANYON
SPRING
NORTH
FORK
GARDEN
SOUTH
FORK
CREEK
BENCH
RUBY MOUNTAINS
MT-076-001
Paved Road
WSA Boundary
ECOTYPES
(Bailey-Kuchler System)
11 Douglas Fir Forest
45 Alpine Meadows and Barren
49 Sagebrush Steppe
56 Foothills, Prairie
N
1 0 1 2 Miles


R6W
R5W
R5W
R4W
T5S
T6S
T6S
T7S
BIG
CREEK
CANYON
CANAL
CANYON
NORTH
FORK
SOUTH
FORK
CREEK
RUBY MOUNTAINS
MT-076-001
Paved Road
WSA Boundary
1 0 1 2 Miles
VISUAL RESOURCES
Scenic Quality Classes
Class A — Outstanding Scenic Values
Class B — Above Average Scenic Values
Class C — Average Scenic Values
Visual Resource Management Classes
Class II — Retention of Landscape Characteristics (no evident changes allowed)
Class III — Partial Retention of Landscape Characteristics (no dominant changes allowed)
Class IV — Modification of Landscape Characteristics (dominant changes allowed)

RUBY MOUNTAINS WSA
GEOLOGIC MAP OF THE NORTHERN RANGE



pC	Precambrian: Cherry Creek Group Metamorphic—gneisses schists, marble
C	Cambrian: Flathead, Wolsey, Meagher, Park, Pilgrim, Red Lion, and Hasmark formations—sandstone, dolomite and shale
M	Mississippian: Lodgepole and Mission Canyon formations—limestone
TKb	Late Cretaceous-Paleocene: Beaverhead formation—carbonate or quartzite conglomerates
Q	Miocene-Pliocene: Valley fill—mostly coarse clastics
Qa	Pleistocene/Quaternary Pediment veneers, alluvium, colluvium, glacial till, lake deposits



RUBY MOUNTAINS
MT-076-001

Paved Road

WSA Boundary

MINING CLAIMS AND MINERAL LEASES

Oil and Gas Leases

Post FLPMA Leases*

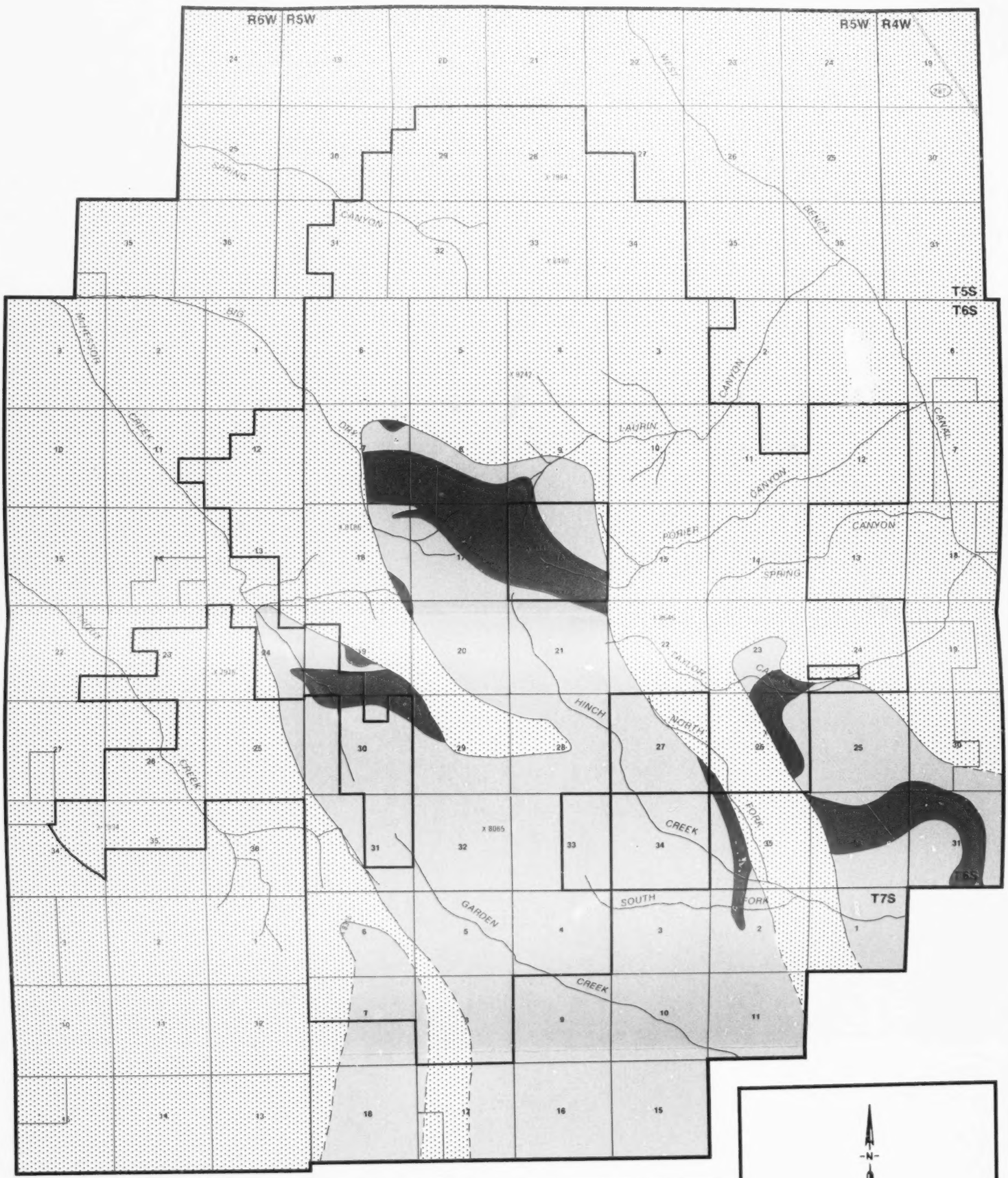
Pre FLPMA Leases (NONE)

Mining Claims (NONE)

*Includes lease applications and leases in simultaneous lottery

1 0 1 2 Miles

N



RUBY MOUNTAINS
MT-076-001

MINERAL POTENTIAL

Paved Road

WSA Boundary

1 0 1 2 Miles

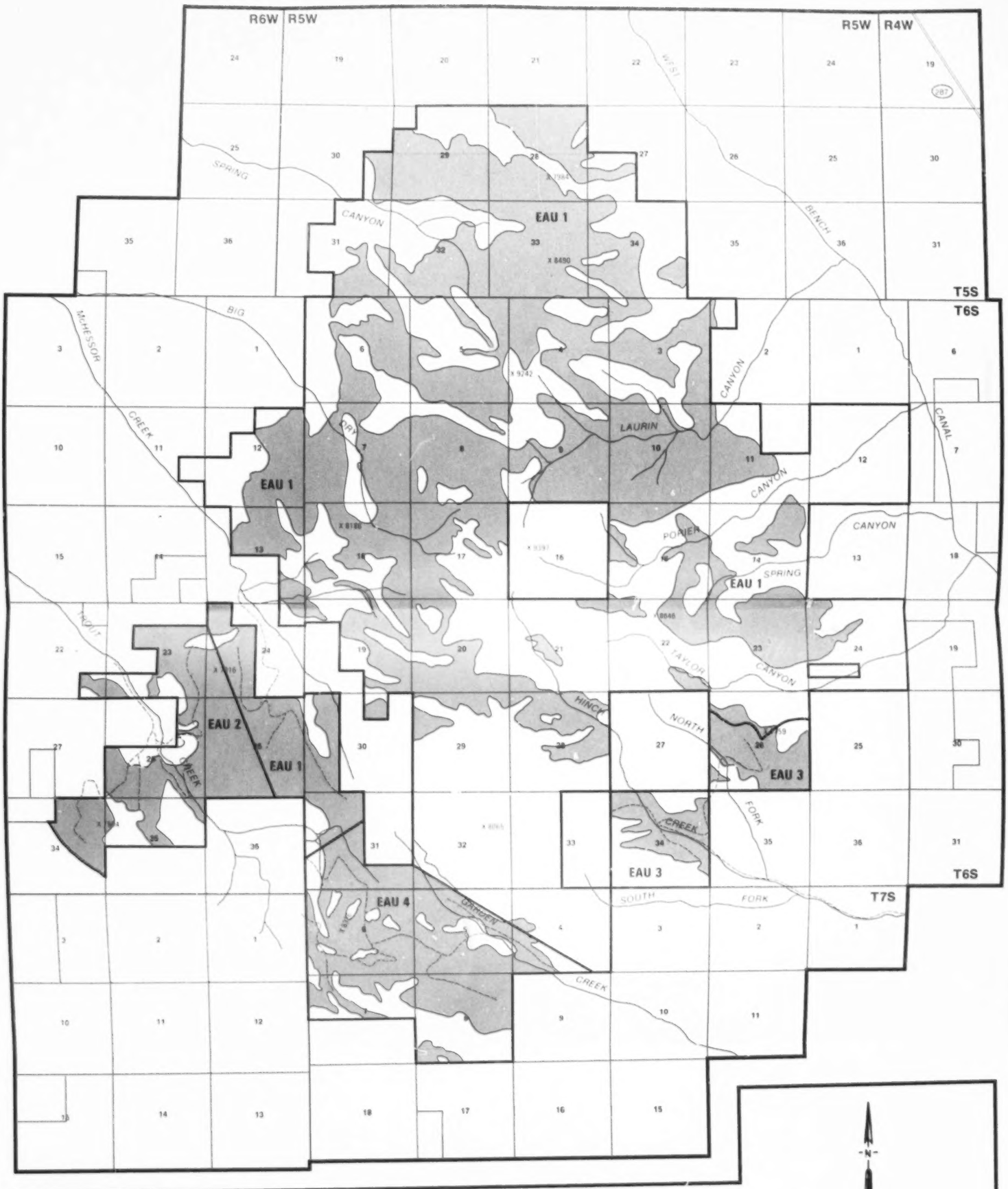
Geology

1 Area Underlain by Pre-Cambrian Marble Units. High Potential for Talc.

2 Area Underlain by Pre-Cambrian Metamorphic Units. Moderate Potential for Iron, Kyanite, Sillimanite and Other Metamorphic Minerals.

3 Areas Underlain by Paleozoic Rocks. Low Potential.

N



RUBY MOUNTAINS
MT-076-001

TIMBER MANAGEMENT

EAU — Economic Analysis Units

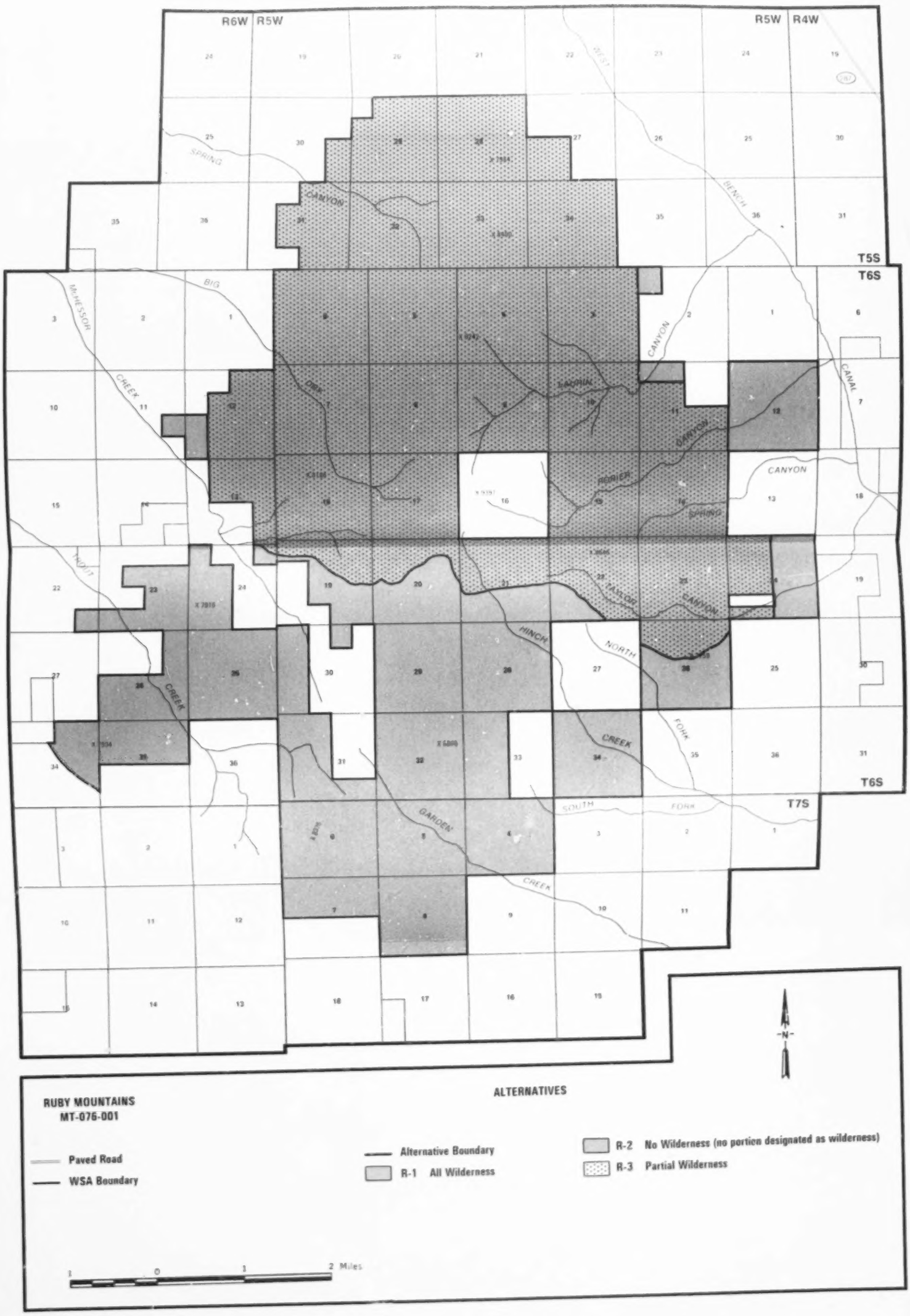
Paved Road

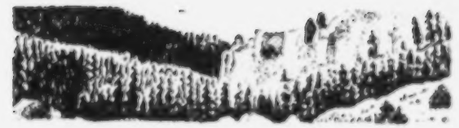
WSA Boundary

Commercial Timber

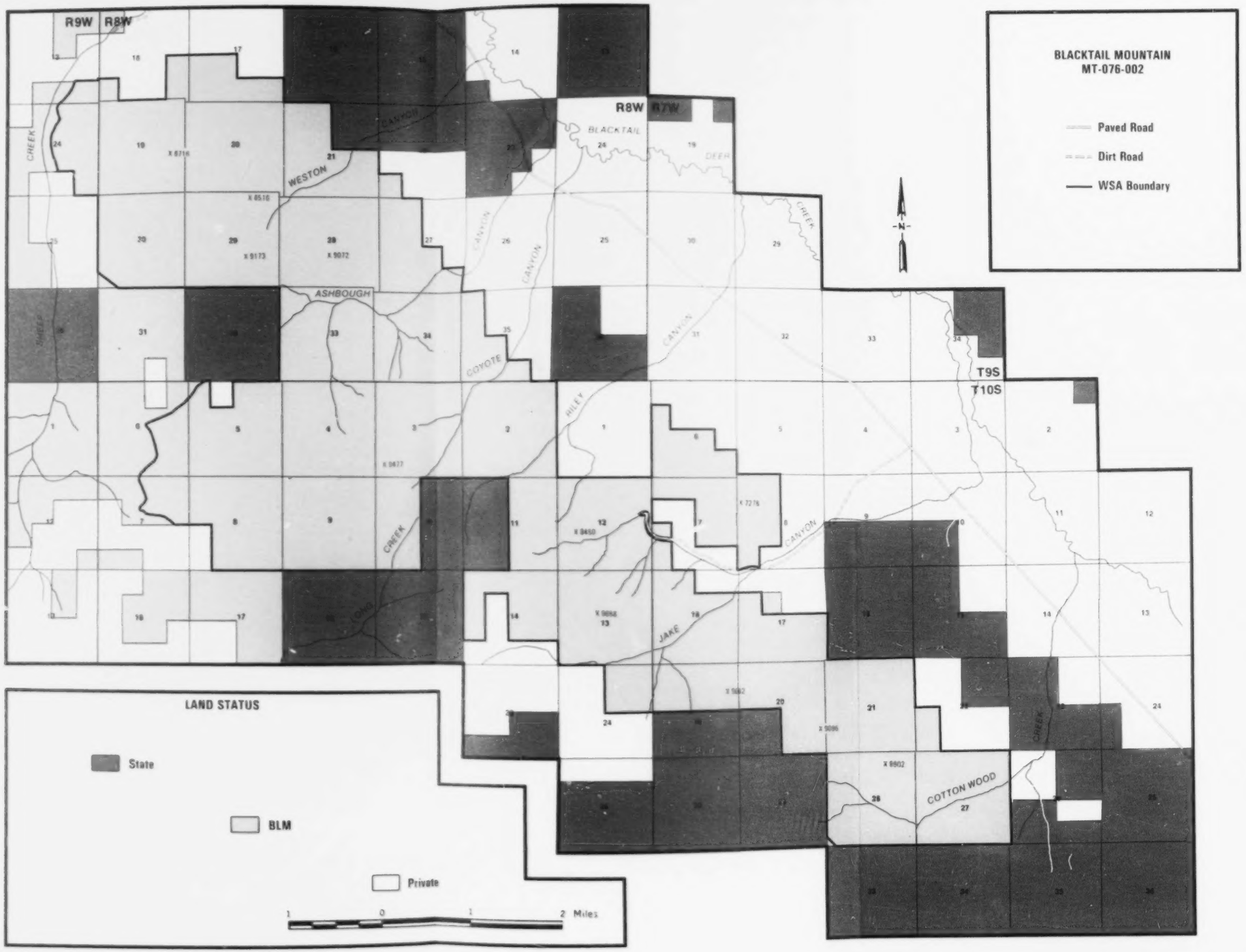
Proposed Roads

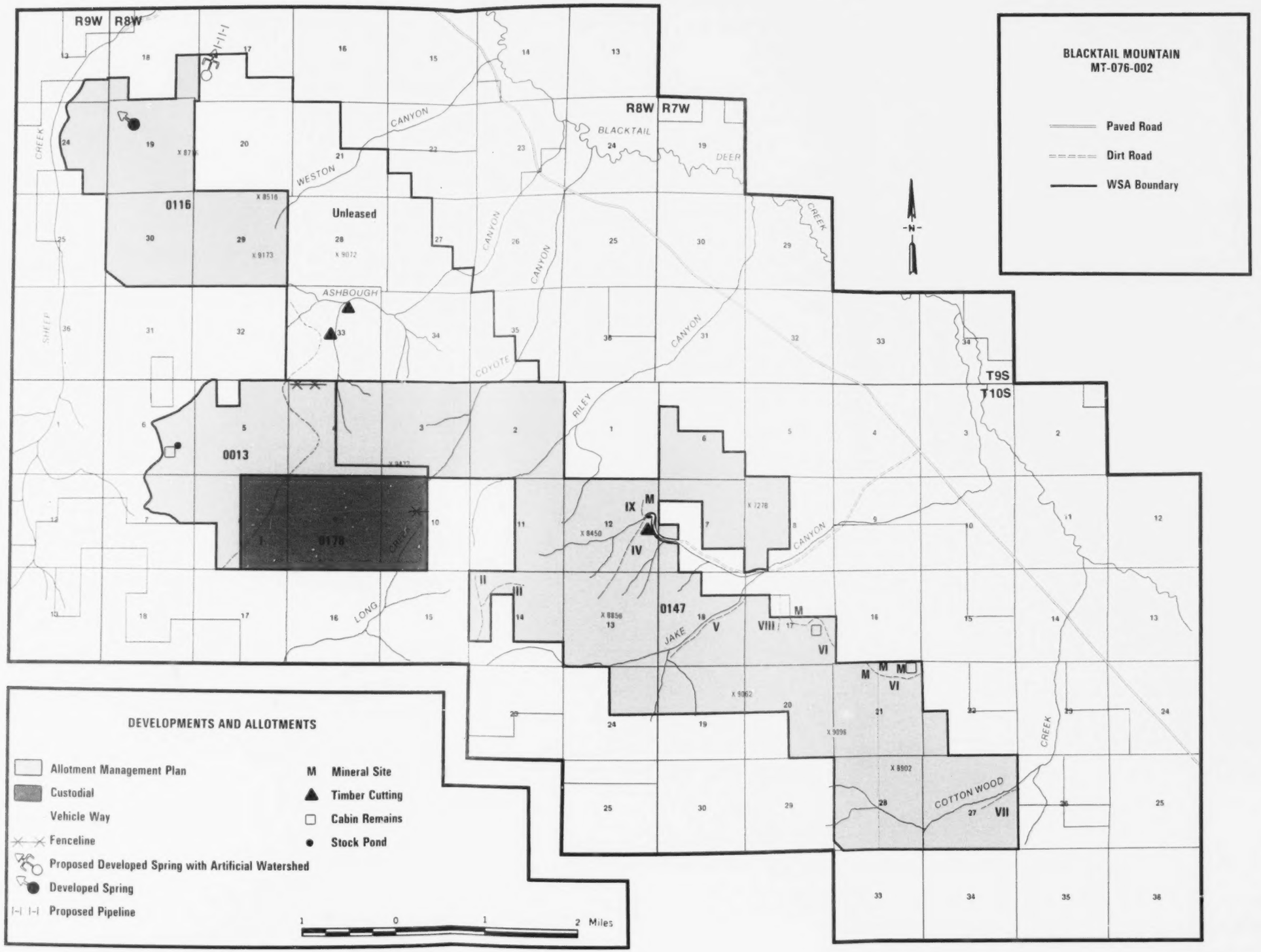
1 0 1 2 Miles

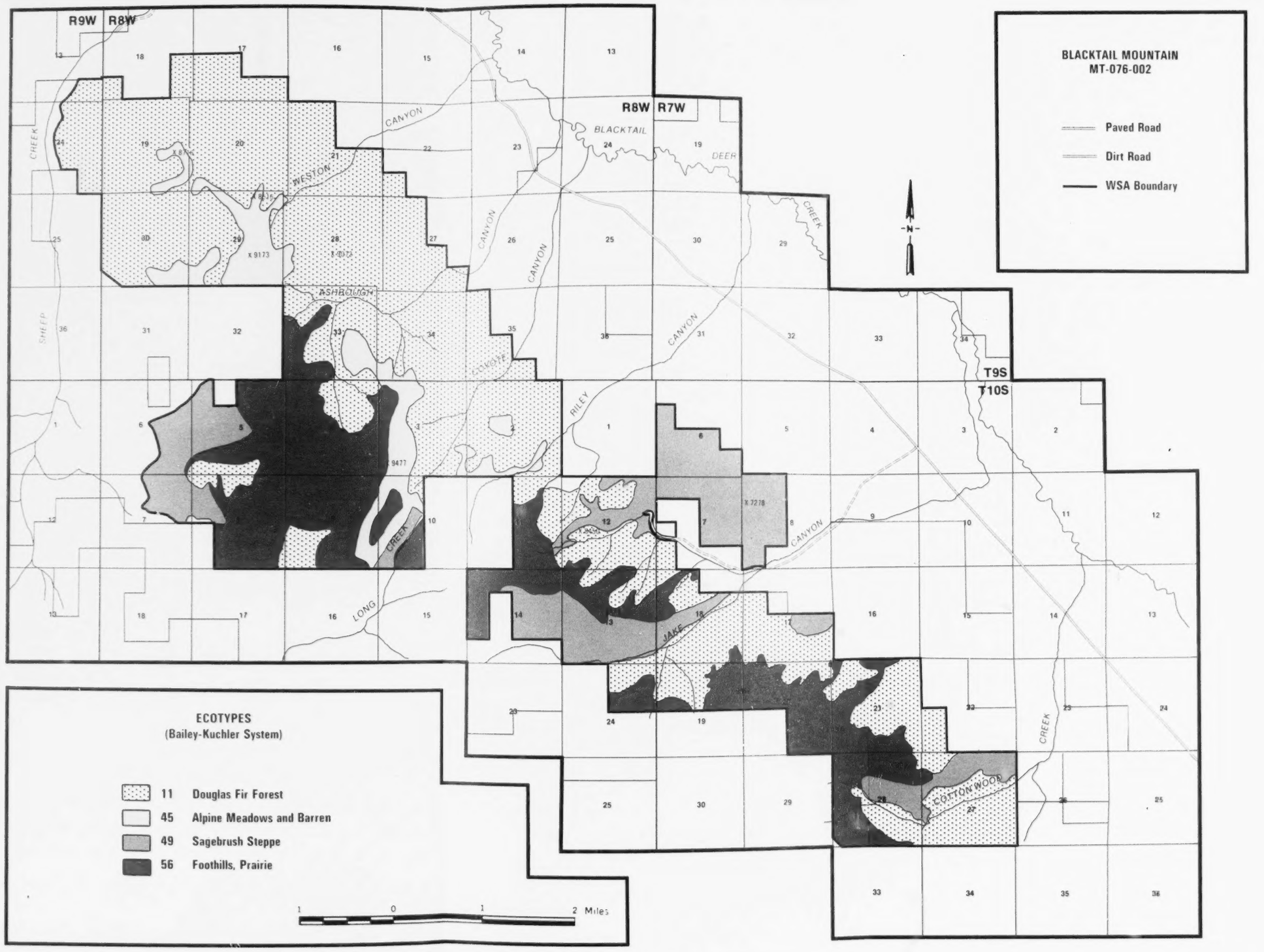

R6W
R5W
R5W
R4W
T5S
T6S
T6S
T7S
BIG
CREEK
SPRING
CANYON
BENCH
CANAL
TAYLOR
CANYON
HINCH
CREEK
NORTH
FORK
SOUTH
FORK
GARDEN
CREEK
N
RUBY MOUNTAINS
MT-076-001
ALTERNATIVES
Paved Road
WSA Boundary
Alternative Boundary
R-1 All Wilderness
R-2 No Wilderness (no portion designated as wilderness)
R-3 Partial Wilderness
1
0
1
2 Miles

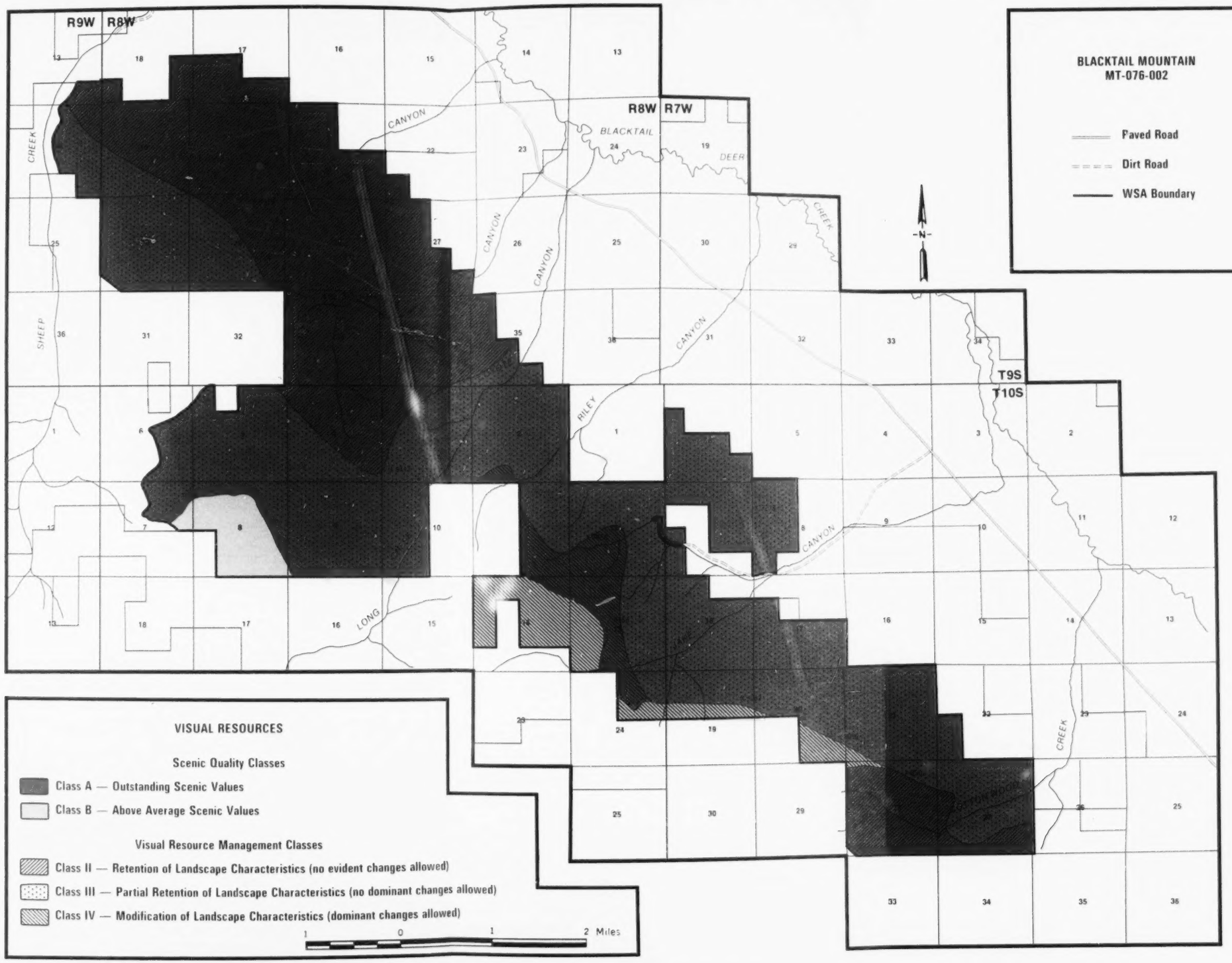


Blacktail Mountains WSA
MT-076-002


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W
R8W
R7W
T9S
T10S
N
LAND STATUS
State
BLM
Private
1 0 1 2 Miles
BLACKTAIL
DEER
CREEK
CANYON
WESTON
ASHBOUGH
SHEEP
COYOTE
RILEY
LONG
JAKE
COTTON WOOD


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W R8W
R8W R7W
T9S
T10S
0116
0013
0178
0147
Unleased
CANYON
WESTON
BLACKTAIL
DEER
CREEK
ASHBOUGH
SHEEP
COYOTE
RILEY
LONG
JAKE
COTTON WOOD
DEVELOPMENTS AND ALLOTMENTS
Allotment Management Plan
Custodial
Vehicle Way
Fenceline
Proposed Developed Spring with Artificial Watershed
Developed Spring
Proposed Pipeline
M Mineral Site
Timber Cutting
Cabin Remains
Stock Pond
1 0 1 2 Miles


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W R8W
R8W R7W
T9S
T10S
N
ECOTYPES
(Bailey-Kuchler System)
11 Douglas Fir Forest
45 Alpine Meadows and Barren
49 Sagebrush Steppe
56 Foothills, Prairie
1 0 1 2 Miles
CANYON
BLACKTAIL
DEER
CREEK
WESTON
ASHBOUGH
SHEEP
COYOTE
RILEY
LONG
JAKE
COTTONWOOD
X 9173
X 7278


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W
R8W
R8W
R7W
T9S
T10S
CANYON
BLACKTAIL
DEER
CREEK
SHEEP
RILEY
LONG
N
VISUAL RESOURCES
Scenic Quality Classes
Class A — Outstanding Scenic Values
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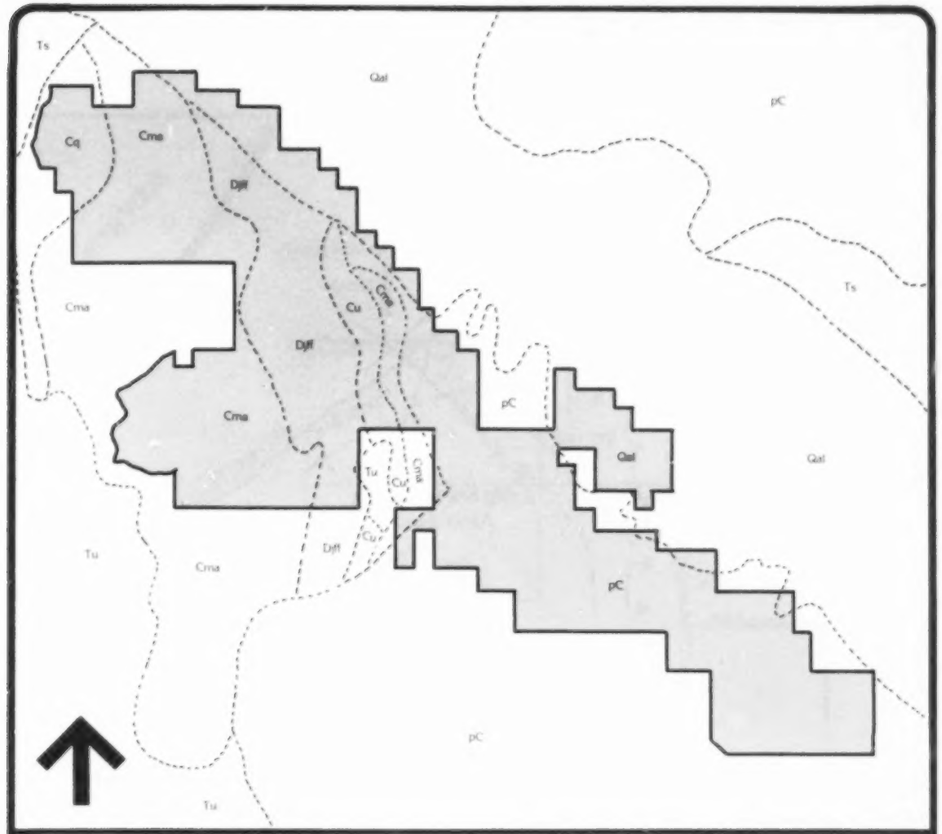
Visual Resource Management Classes
Class II — Retention of Landscape Characteristics (no evident changes allowed)
Class III — Partial Retention of Landscape Characteristics (no dominant changes allowed)
Class IV — Modification of Landscape Characteristics (dominant changes allowed)
2 1 0 1 2 Miles

BLACKTAIL MOUNTAINS WSA
GENERAL GEOLOGIC MAP



Qal Valley fil

Ts Sedimentary rocks

Tu Volcanic rocks

Ku Sedimentary rocks

Kk Kootenai formation

Ttw Thaynes(?) formation and Woodside shale

Td Dinwoody formation

Pp Phosphoria formation

Cq Quadrant formation

Cma Amsden(?) formation and Madison Limestone

Djf Three Forks(?) shale and Jefferson dolomite

Cd Undifferentiated Cambrian sedimentary rocks

Cu Dry Creek shale and Woolsey(?) shale

Cf Flathead quartzite

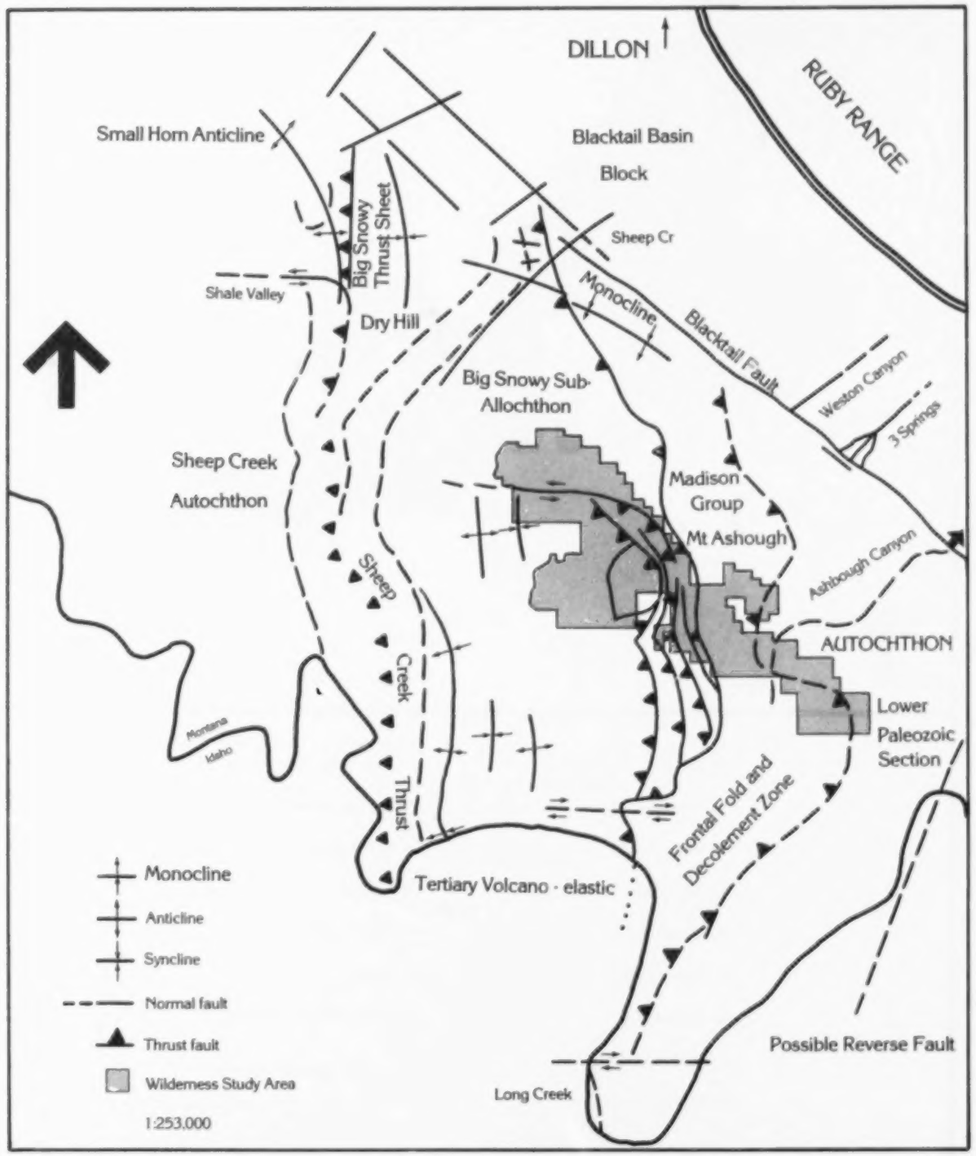
pCgn Gneissic

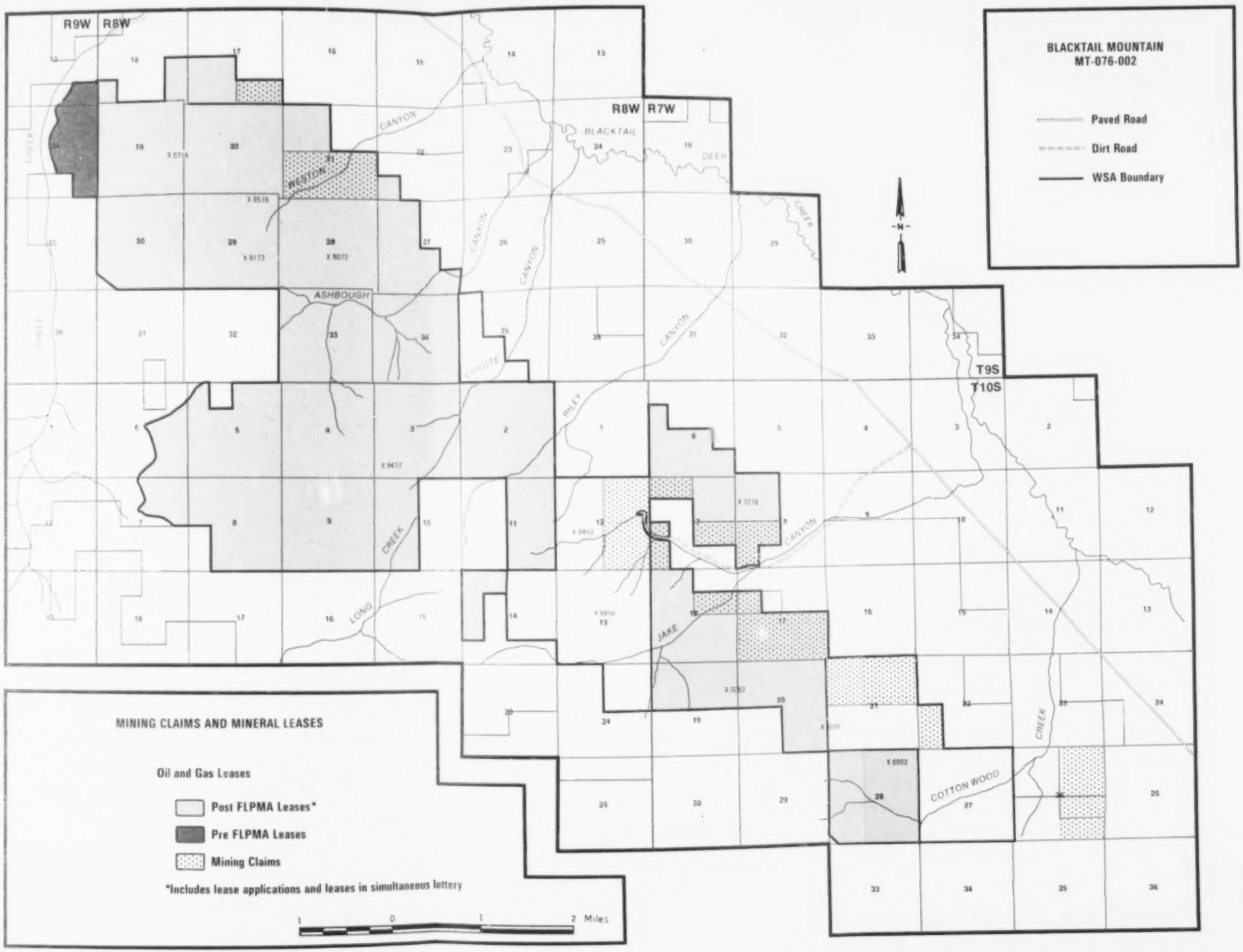
pC Marble, quartzite mica and schist

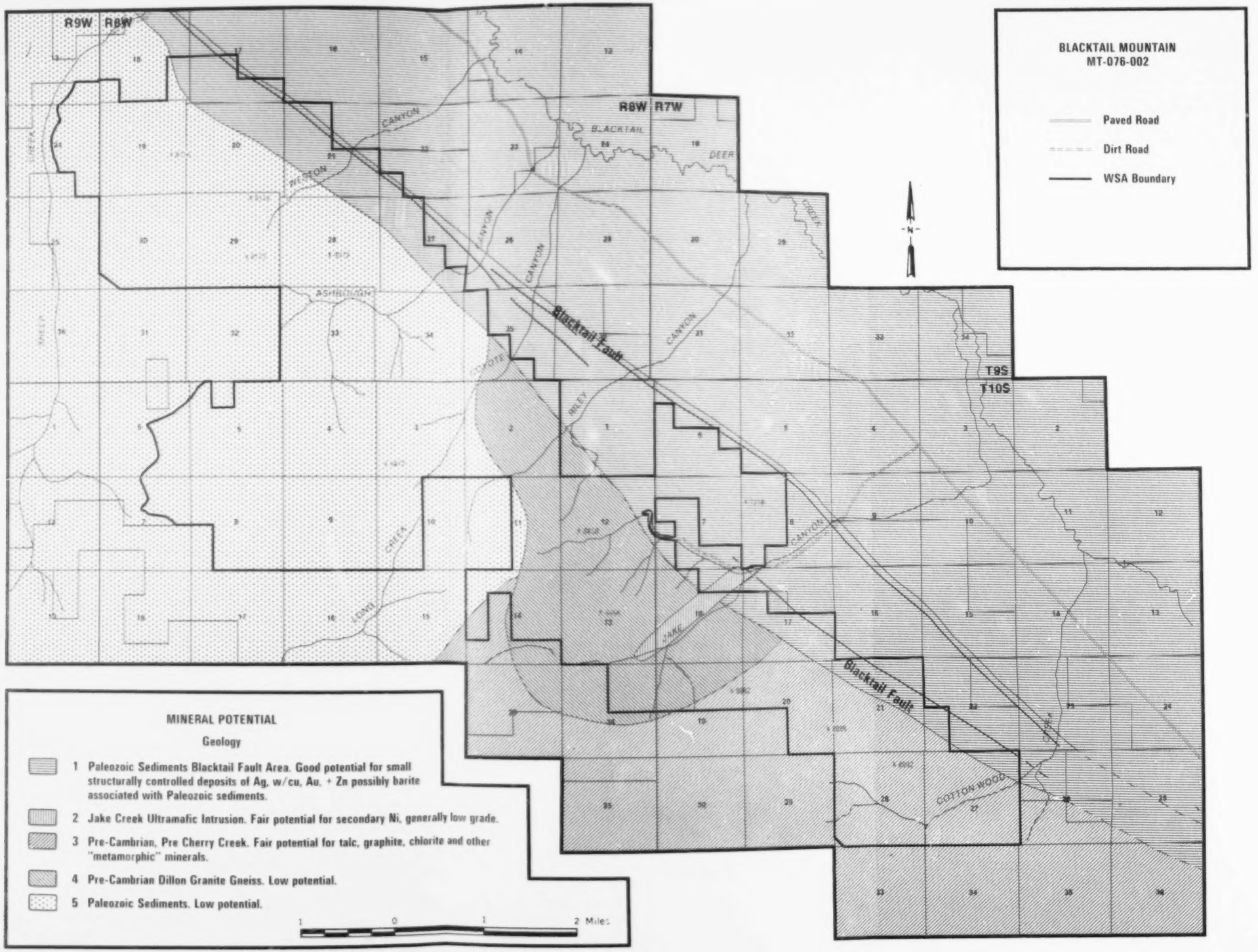
Wilderness Study Area

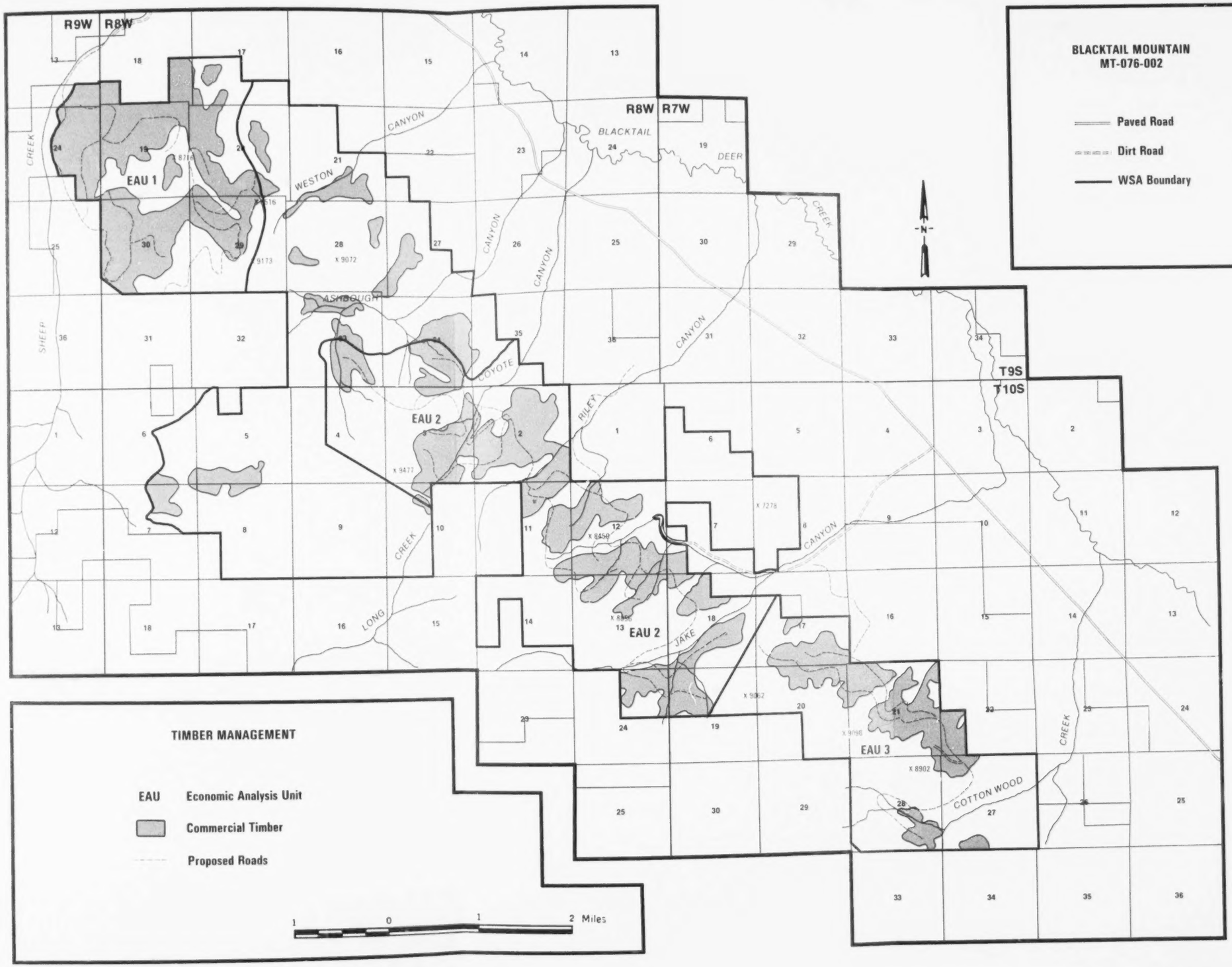
1:113,000

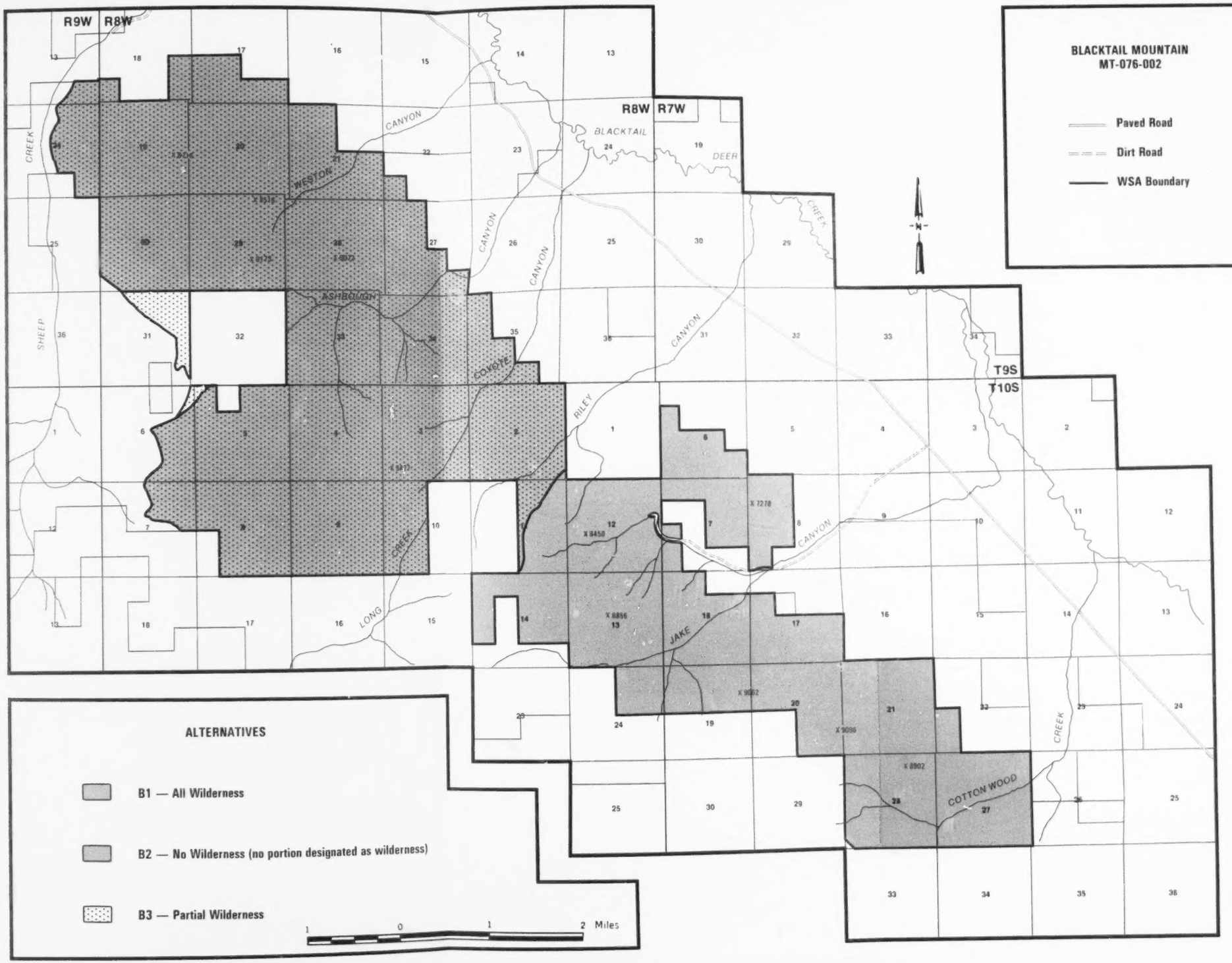
BLACKTAIL MOUNTAINS WSA
GENERALIZED GEOLOGIC STRUCTURE MAP



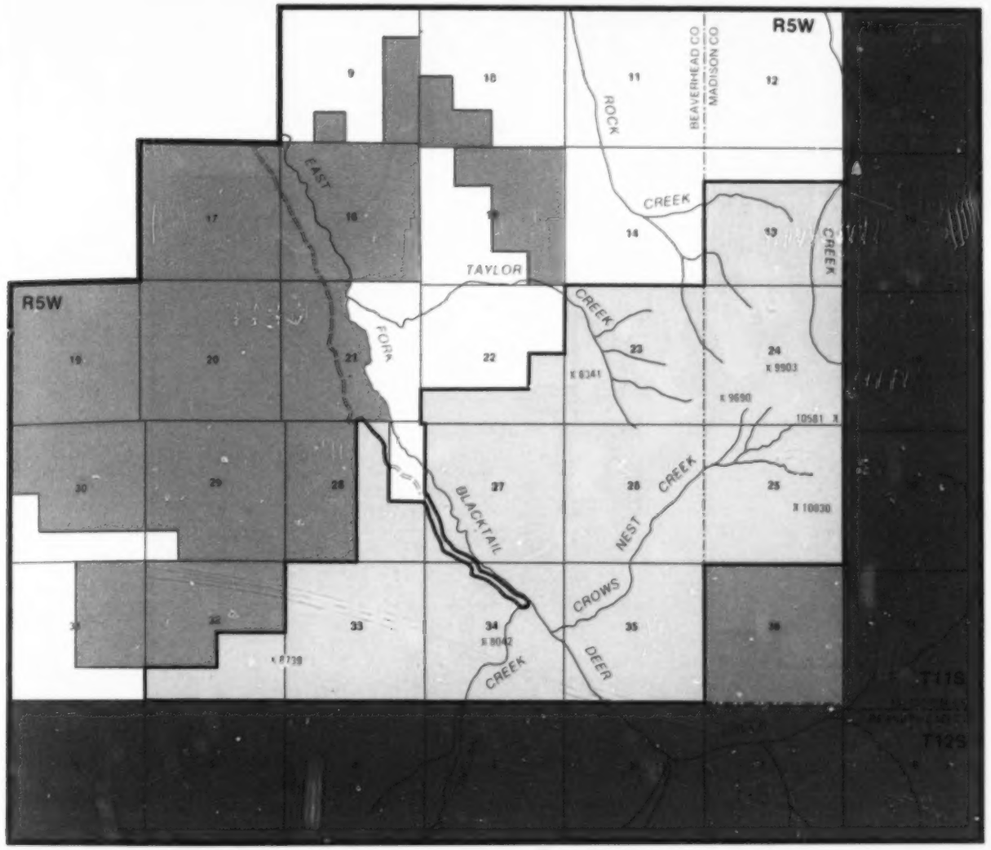

BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W R8W
R8W R7W
T9S
T10S
CANYON
BLACKTAIL
DEER
CREEK
WESTON
ASHBOUGH
COYOTE
IRLEY
LONG
JAKE
COTTON WOOD
X 9716
X 9516
X 9173
X 9072
X 9477
X 7278
X 6902
MINING CLAIMS AND MINERAL LEASES
Oil and Gas Leases
Post FLPMA Leases*
Pre FLPMA Leases
Mining Claims
*Includes lease applications and leases in simultaneous lottery
1 0 1 2 Miles


R9W R8W
R8W R7W
T9S
T10S
Blacktail Fault
Blacktail Fault
CANYON
BLACKTAIL
DEER
CREEK
ASHBURN
JAKE
COTTONWOOD
N
BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
MINERAL POTENTIAL
Geology
1 Paleozoic Sediments Blacktail Fault Area. Good potential for small structurally controlled deposits of Ag, w/cu, Au, + Zn possibly barite associated with Paleozoic sediments.
2 Jake Creek Ultramafic Intrusion. Fair potential for secondary Ni, generally low grade.
3 Pre-Cambrian, Pre Cherry Creek. Fair potential for talc, graphite, chlorite and other "metamorphic" minerals.
4 Pre-Cambrian Dillon Granite Gneiss. Low potential.
5 Paleozoic Sediments. Low potential.
1 0 1 2 Miles


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W R8W
R8W R7W
T9S
T10S
EAU 1
EAU 2
EAU 2
EAU 3
CANYON
BLACKTAIL
DEER
CREEK
WESTON
ASHBOUGH
COYOTE
RILEY
LONG
JAKE
COTTON WOOD
SHEEP
N
TIMBER MANAGEMENT
EAU Economic Analysis Unit
Commercial Timber
Proposed Roads
1 0 1 2 Miles


BLACKTAIL MOUNTAIN
MT-076-002
Paved Road
Dirt Road
WSA Boundary
R9W R8W
R8W R7W
T9S
T10S
CREEK
CANYON
BLACKTAIL
DEER
WESTON
ASHBOUGH
SHEEP
COYOTE
RILEY
LONG
JAKE
COTTON WOOD
X 8179
X 8072
X 9812
X 8450
X 7278
X 8856
X 9062
X 9096
X 8902
ALTERNATIVES
B1 — All Wilderness
B2 — No Wilderness (no portion designated as wilderness)
B3 — Partial Wilderness
1 0 1 2 Miles

East Fork of Blacktail Deer Creek WSA
MT-076-007


R5W
R5W
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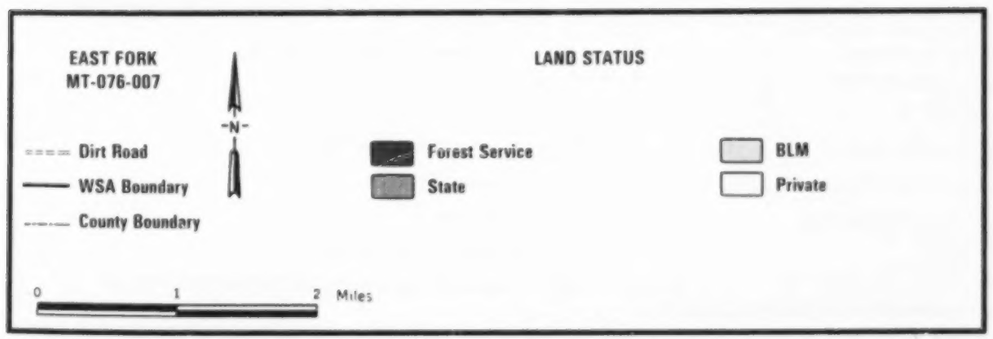
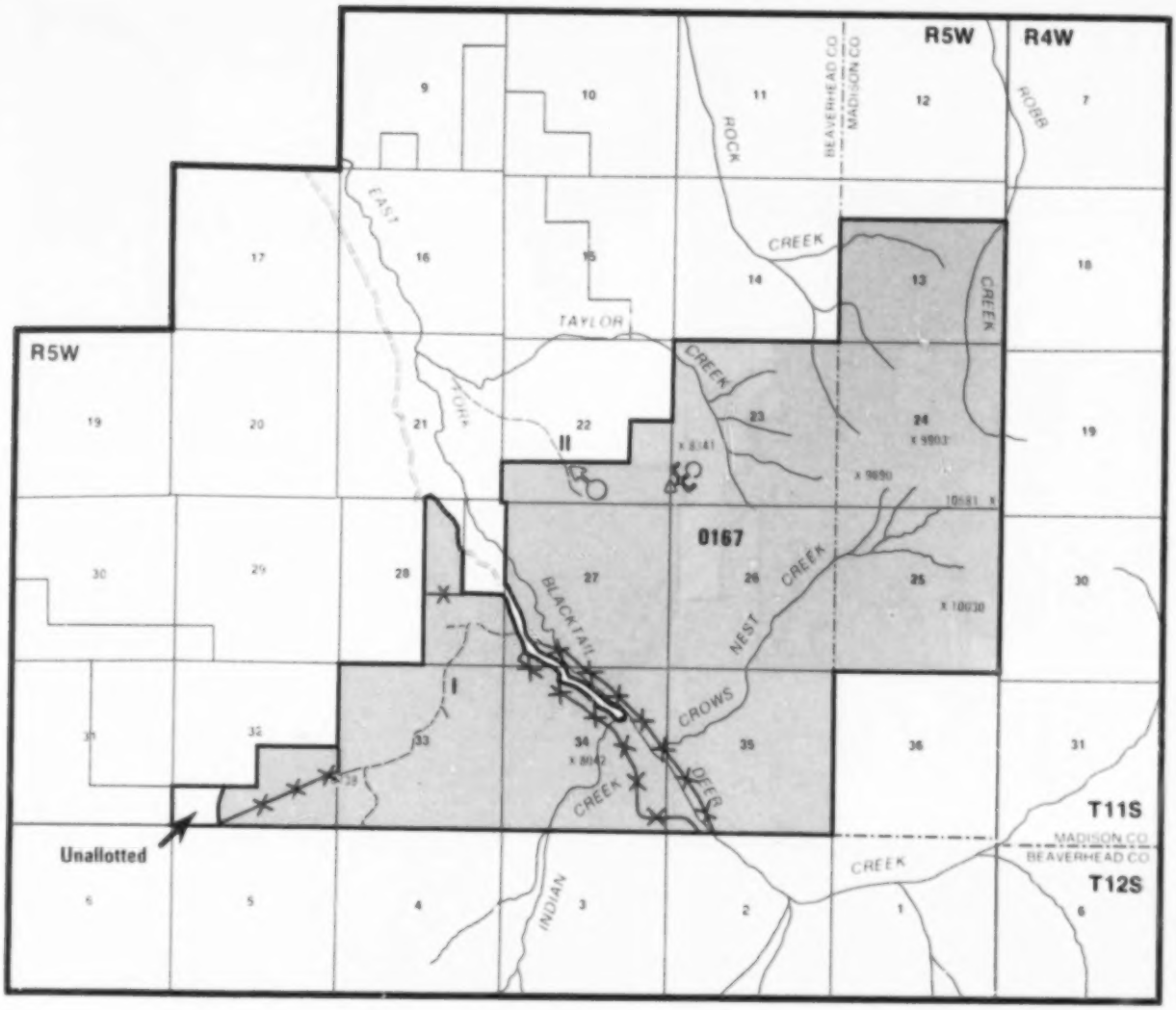
36
EAST FORK
ROCK CREEK
BEAVERHEAD CO.
MADISON CO.
TAYLOR CREEK
CREEK
BLACKTAIL
NEST CREEK
CROWS
DEER CREEK
T11S
T12S


EAST FORK
MT-076-007
Dirt Road
WSA Boundary
County Boundary
-N-
LAND STATUS
Forest Service
State
BLM
Private
0
1
2 Miles



EAST FORK
MT-076-007

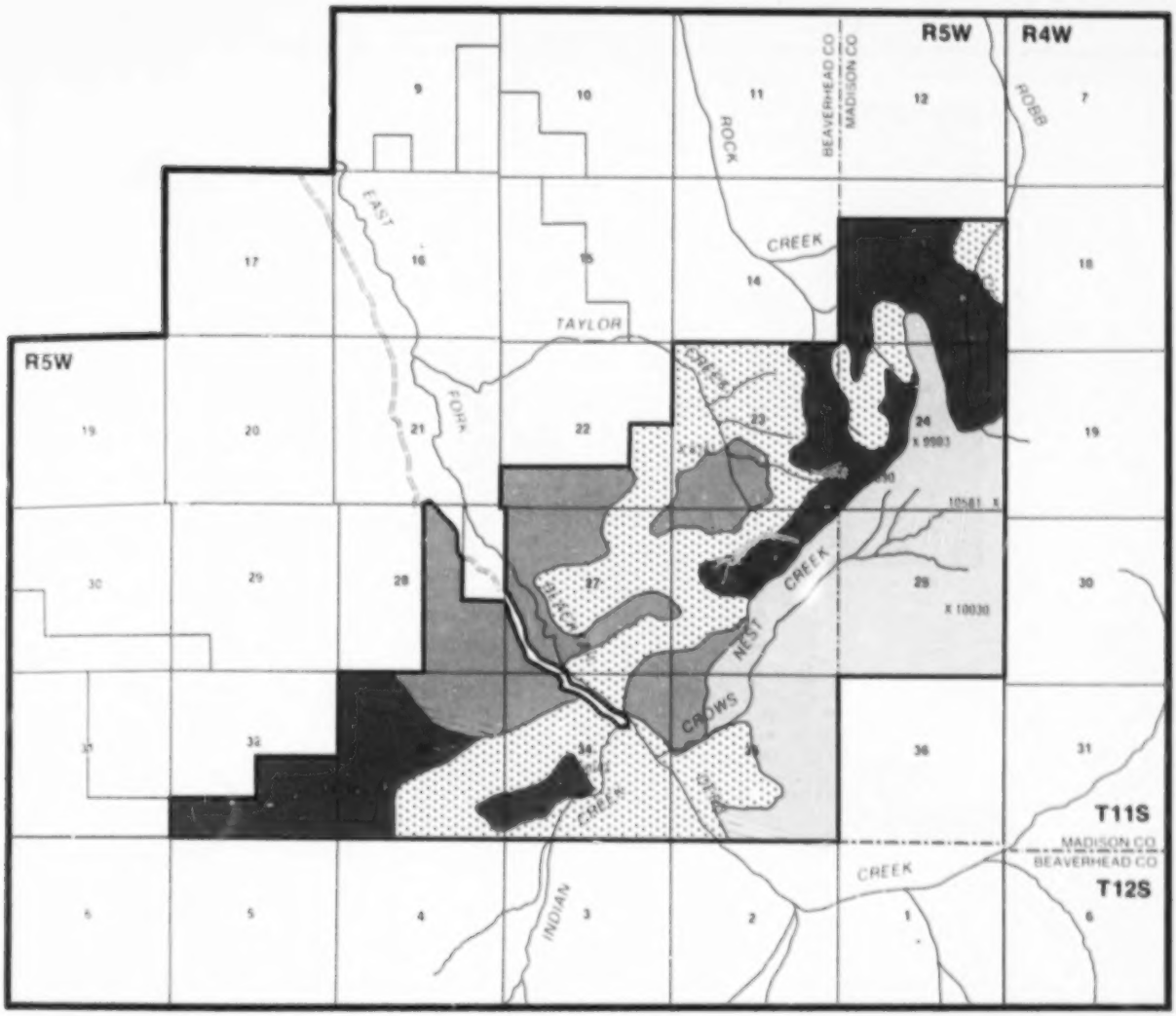
N

Dirt Road
WSA Boundary
County Boundary

0 1 2 Miles

DEVELOPMENTS AND ALLOTMENTS

Allotment Management Plan
Fenceline
Vehicle Way
Proposed Developed Spring
Proposed Developed Spring with Artificial Watershed



EAST FORK
MT-076-007

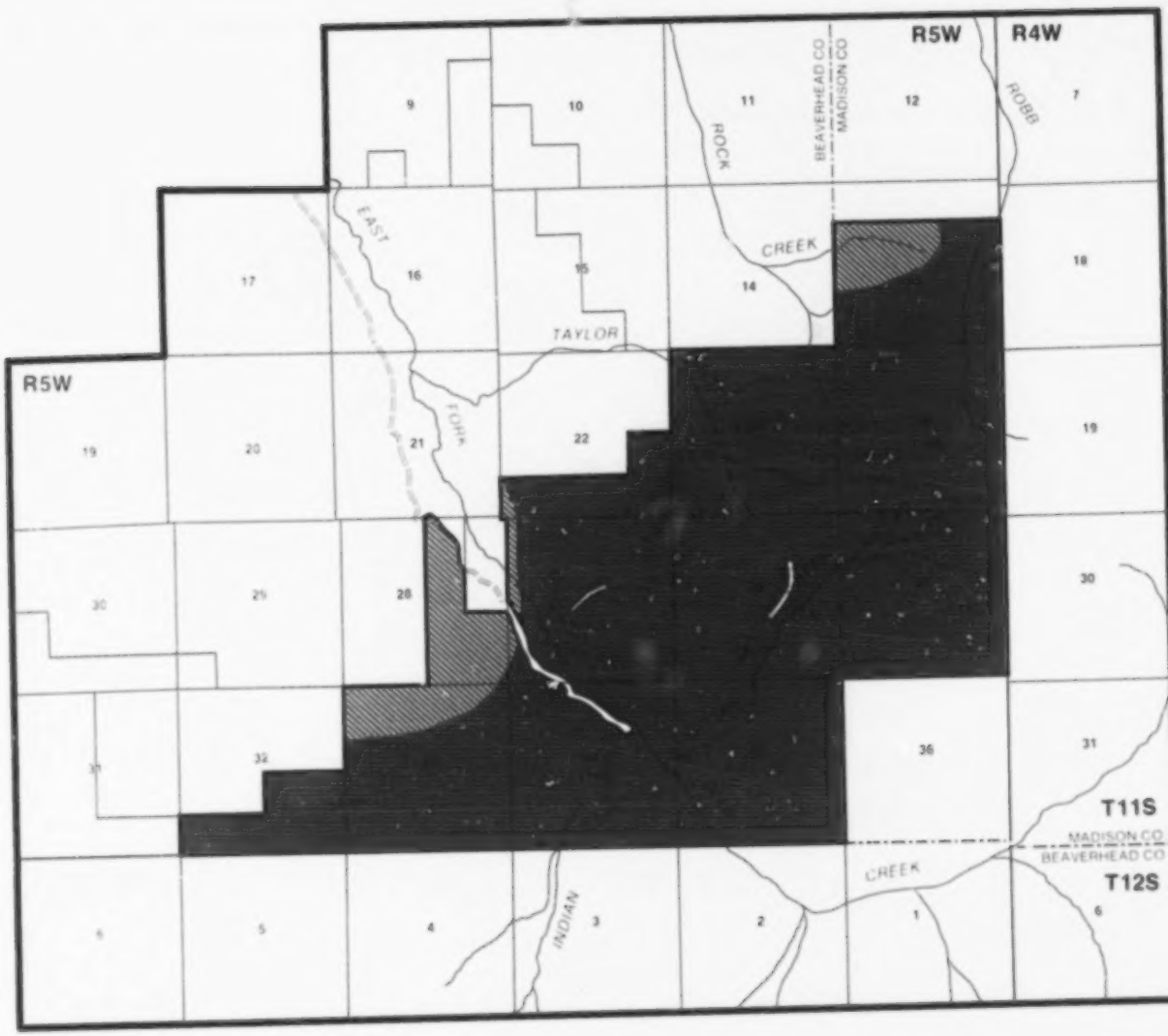
N

ECOTYPES
(Bailey-Kuchler System)

- Dirt Road
- WSA Boundary
- County Boundary

- 11 Douglas Fir Forest
- 45 Alpine Meadows and Barren
- 49 Sagebrush Steppe
- 56 Foothills, Prairie

0 1 2 Miles



EAST FORK
MT-076-007

Dirt Road

WSA Boundary

County Boundary

N

0 1 2 Miles

VISUAL RESOURCES

Scenic Quality Classes

Class A — Outstanding Scenic Values

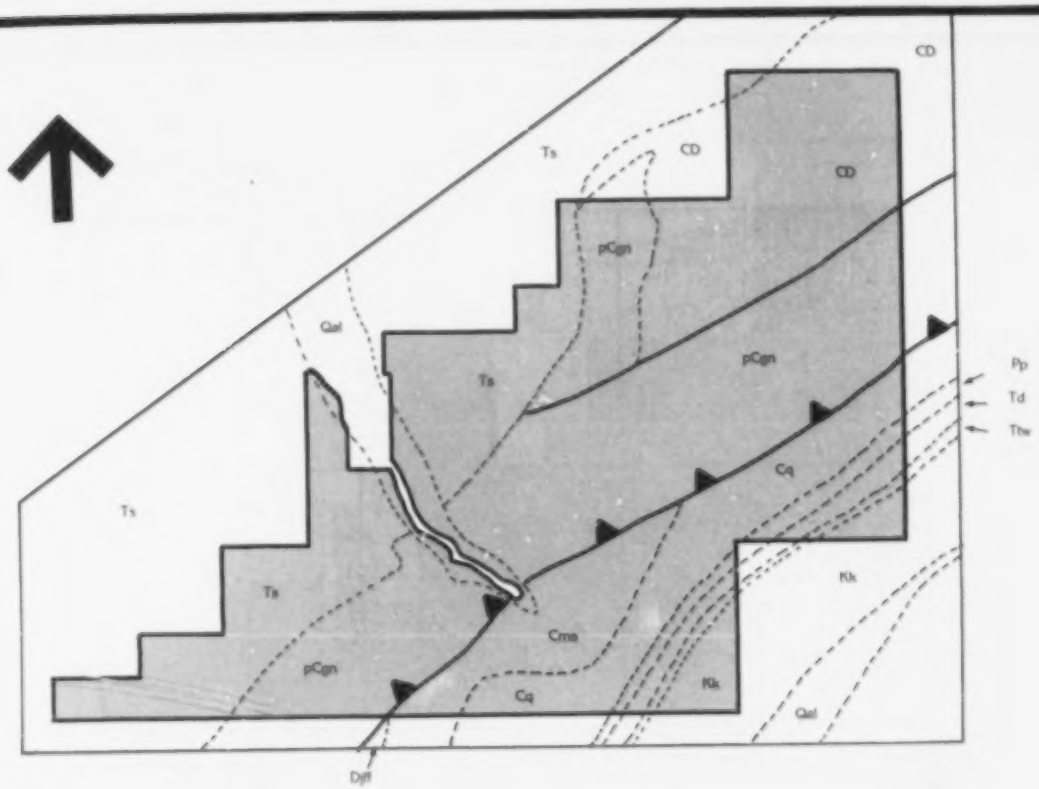
Class C — Average Scenic Values

Visual Resource Management Classes

Class II — Retention of Landscape Characteristics (no evident changes allowed)

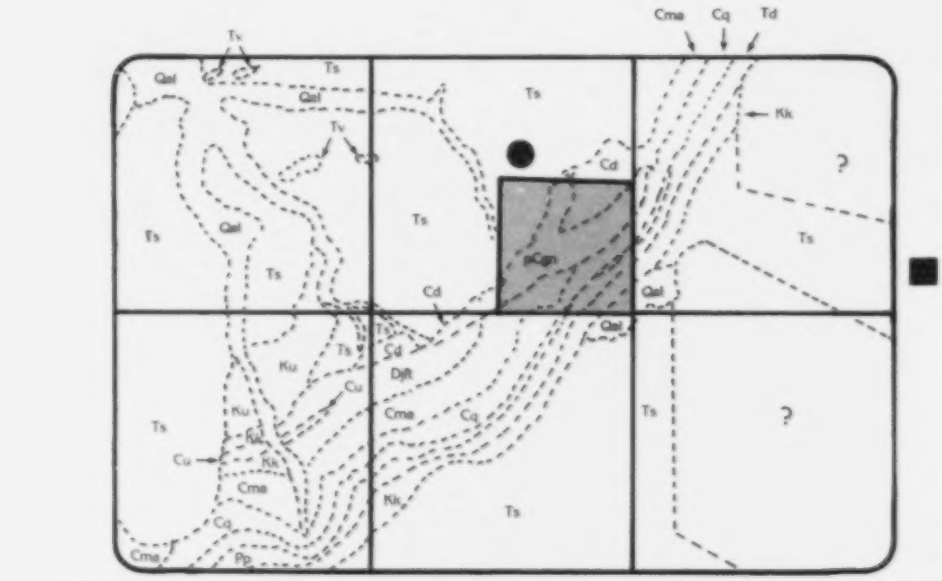
Class IV — Modification of Landscape Characteristics (dominant changes allowed)

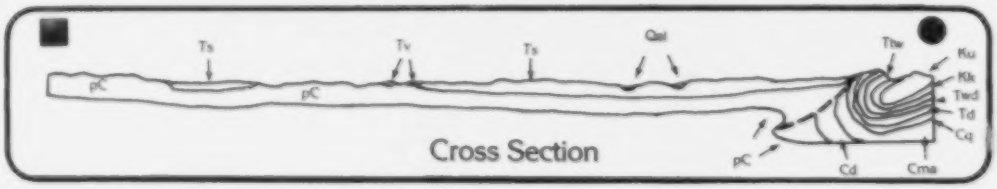
EAST FORK WSA
GENERALIZED GEOLOGY MAP



Qal	Quaternary Alluvium	CD	?
Kk	Kootenai formation	Ts	Tertiary Sediments
Thw	Thayneg formation (Woodside shale)	pCgn	Granite Gneiss
Td	Dinwoody formation		Normal fault
Pp	Phosphoria formation		Thrust fault
Cq	Quadrant Quartzite		Wilderness Study Area
Cma	Madison/Amsolen formation		
Dif	Three Forks formation (Jefferson shale)		1:63360

EAST FORK WS
REGIONAL GEOLOGY MA





Cross Section

Qal Valley Fill

Ts Sedimentary rocks

Tv Volcanic rocks

Angular Unconformity

Ku Sedimentary rocks

Kk Kootenai formation

Disconformity

Thw Thaynes(?) & Woodside(?) shale

Tcf Dinwoody formation

Cq Quadrant formation

Pp Phosphoria formation

Cma Amsden(?) formation & Madison Limestone

Djtf Three Forks(?) shale & Jefferson dolomite

Disconformity

Cu Dry Creek(?) shale

Cd Undifferentiated Cambrian & P Devonian sedimentary rocks

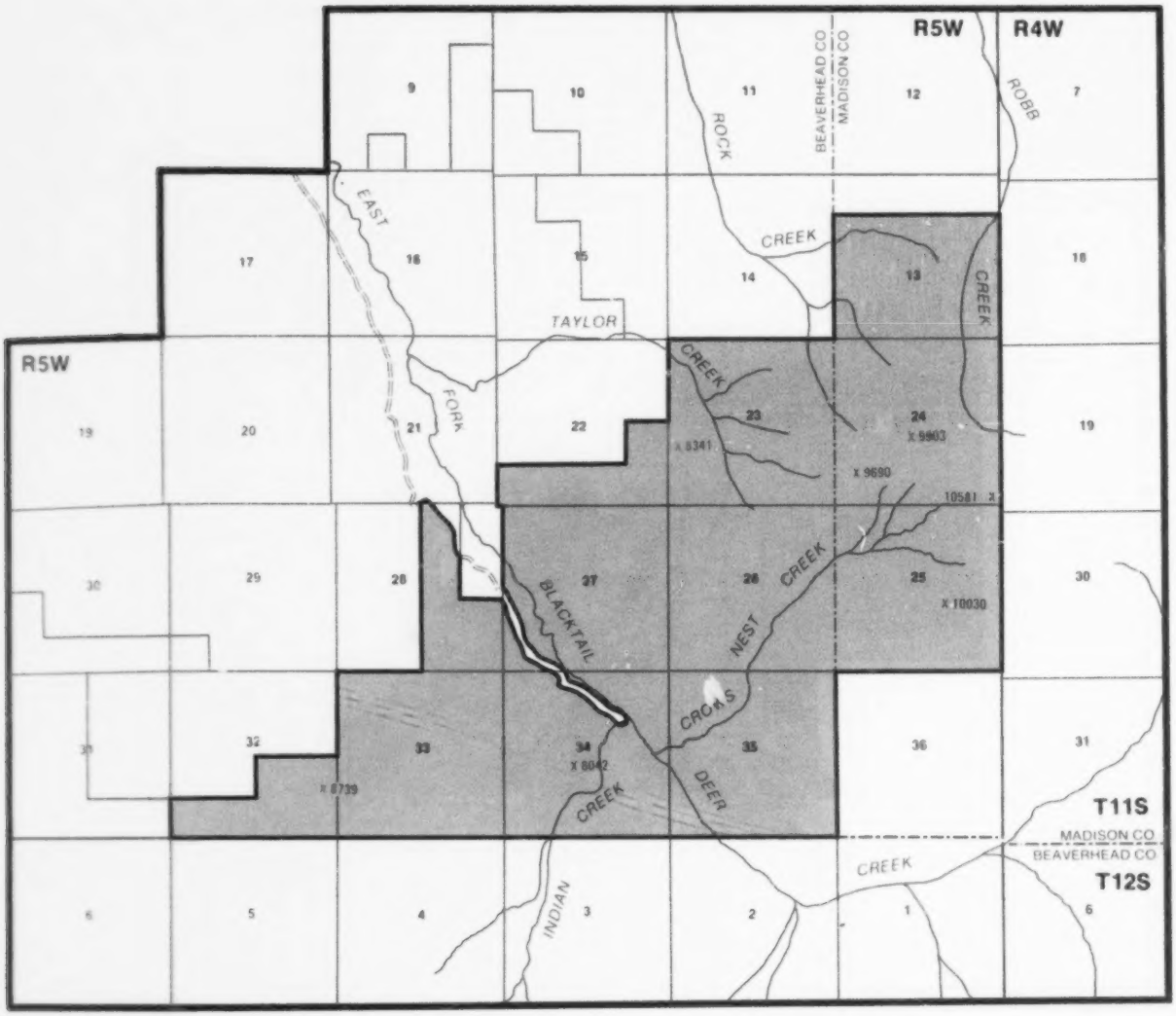
Angular Unconformity

pCgn Gneissic rocks

pC Marble quartzite

Wilderness Study Area

1:253,000



EAST FORK
MT-076-007

-N-

MINING CLAIMS AND MINERAL LEASES

Dirt Road

WSA Boundary

County Boundary

Oil and Gas Leases

Post FLPMA Leases*

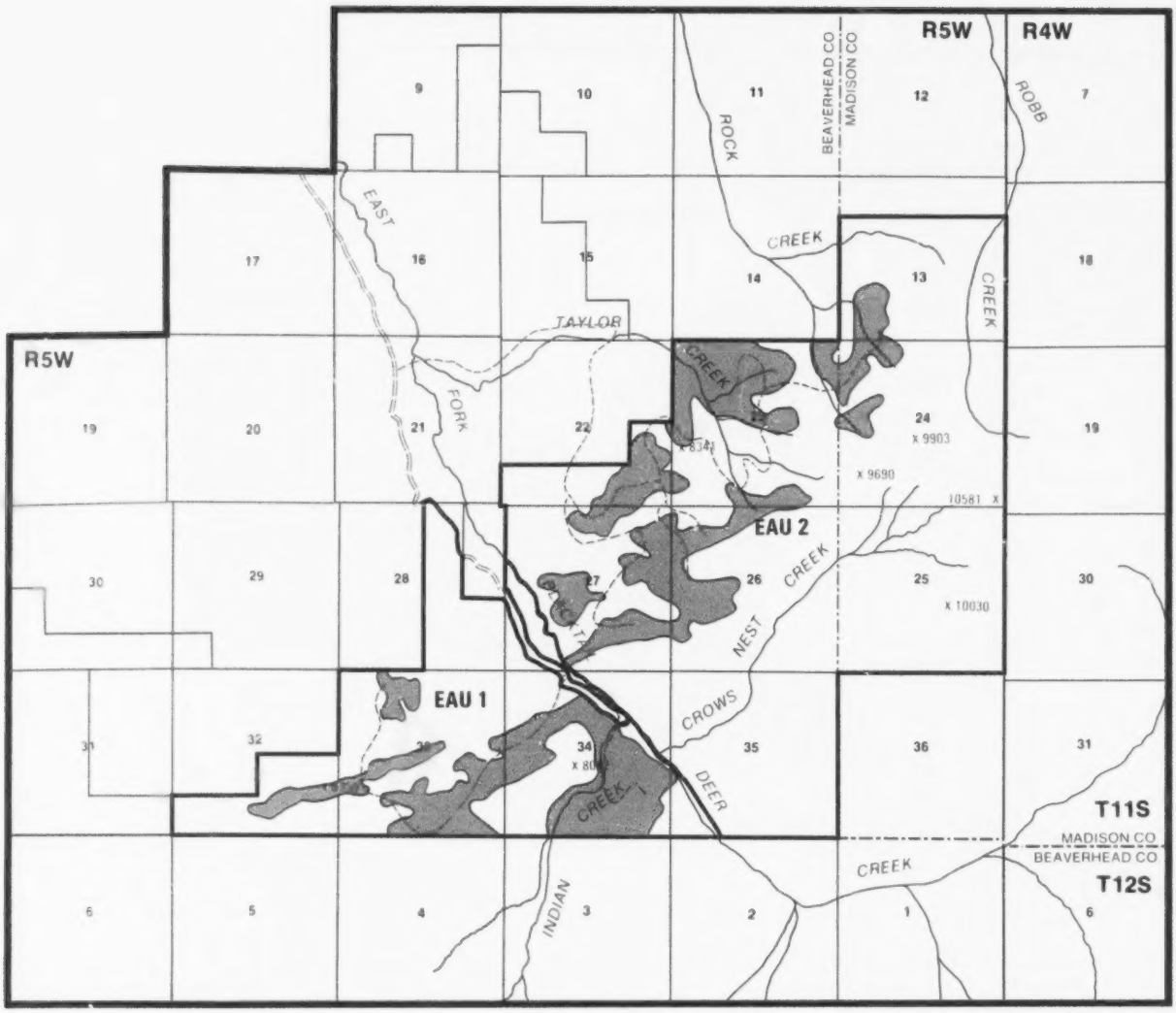
Pre FLPMA Leases (NONE)

Mining Claims (NONE)

0 1 2 Miles

*Includes lease applications and leases in simultaneous lottery

pages tightly bound



EAST FORK
MT-076-007

TIMBER MANAGEMENT

N

Dirt Road

WSA Boundary

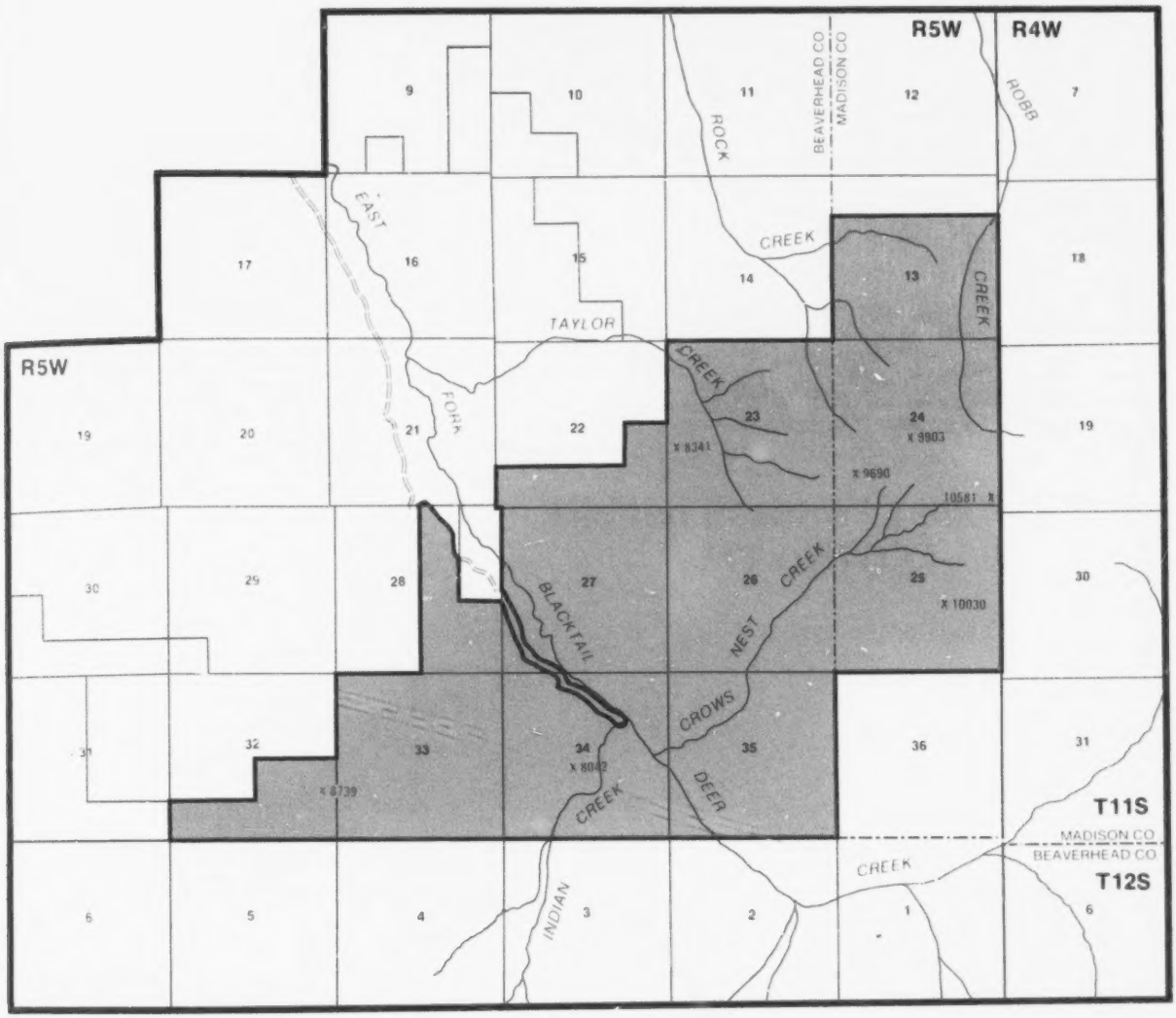
County Boundary

EAU Economic Analysis Units

Proposed Roads

Commercial Timber

0 1 2 Miles



EAST FORK
MT-076-007

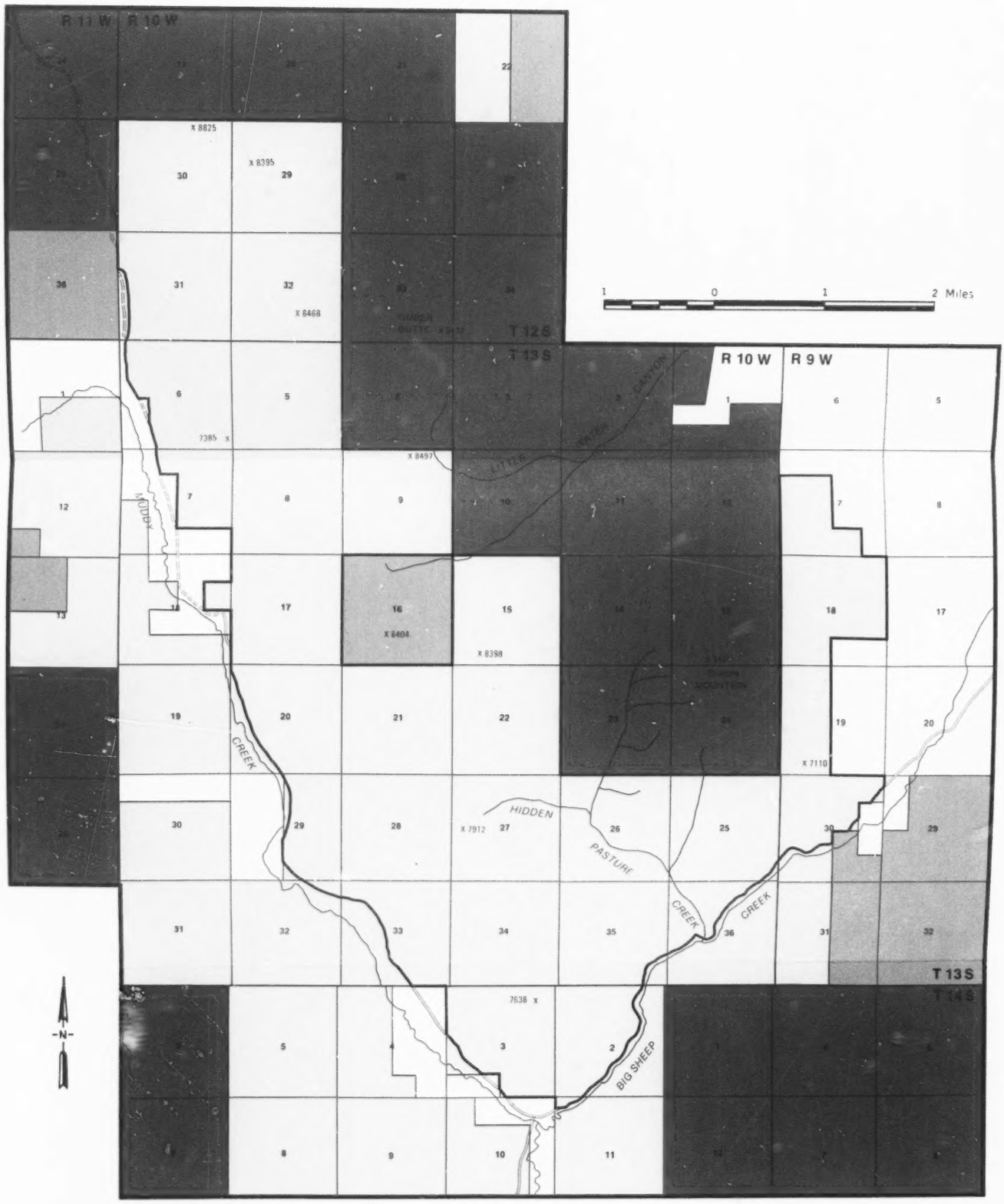
ALTERNATIVES

- Dirt Road
- WSA Boundary
- County Boundary
- Alternative Boundary
- EF-1 All Wilderness
- EF-2 No Wilderness (no portion designated as wilderness)

-N-

0 1 2 Miles

Hidden Pasture Creek WSA
MT-076-022

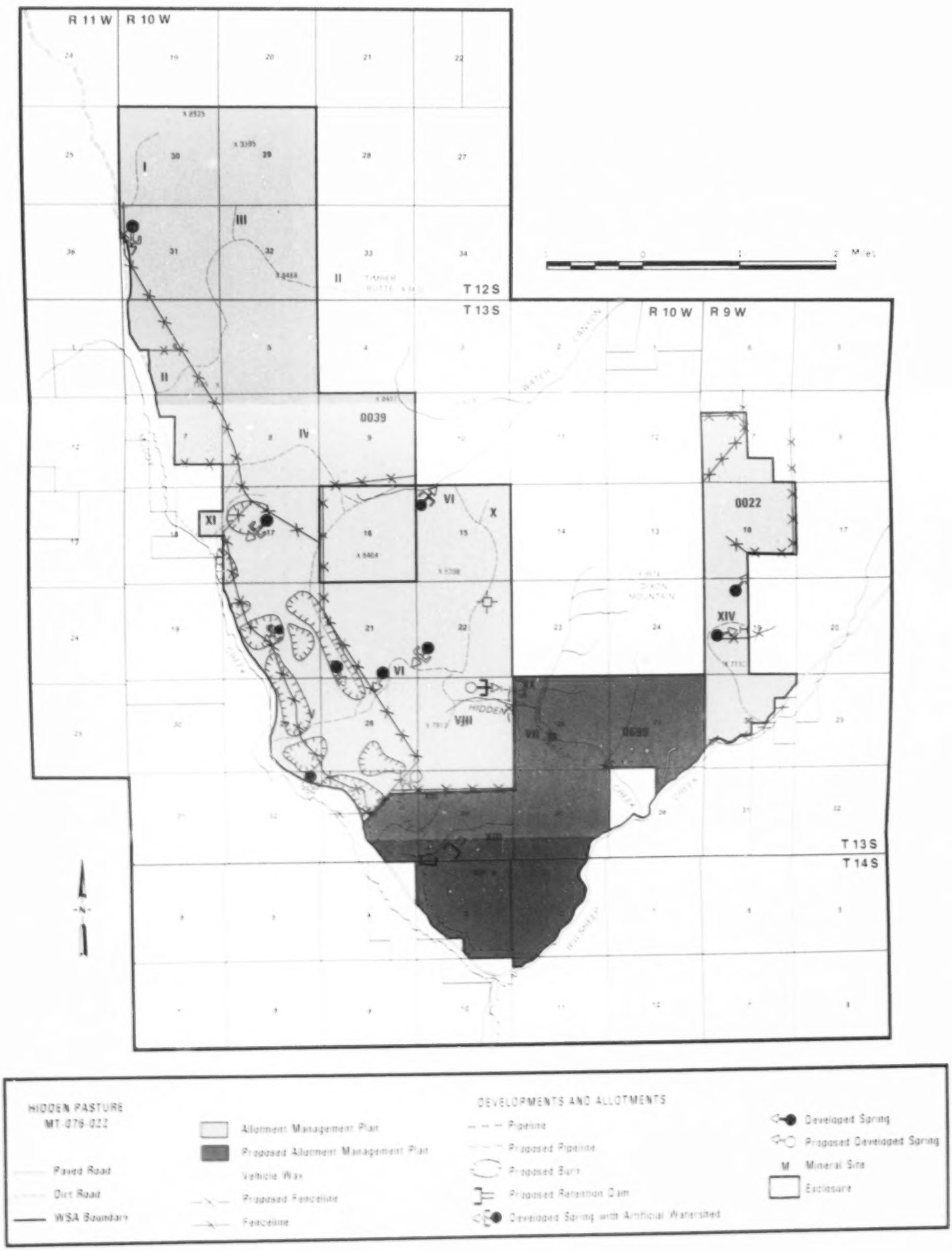


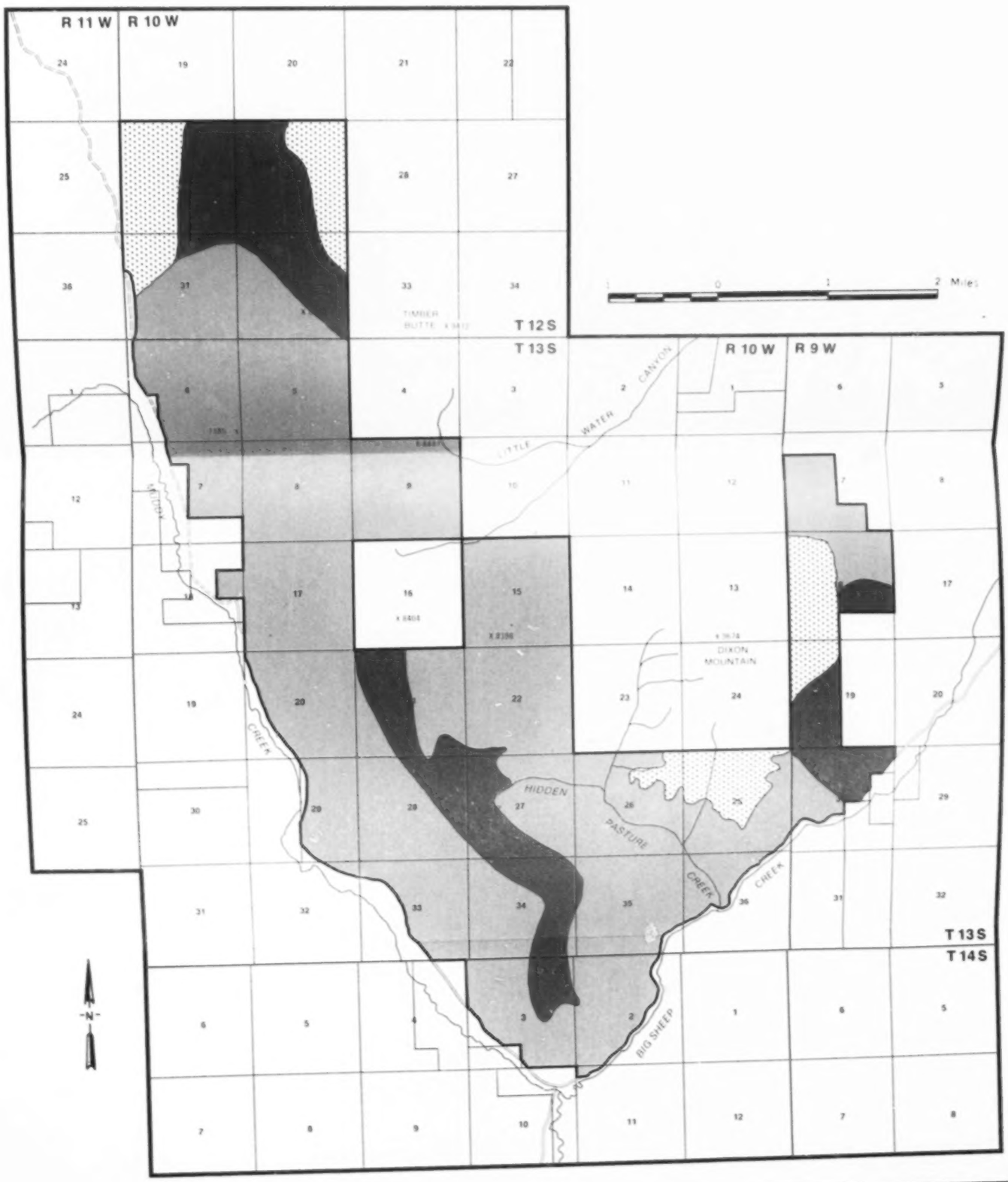
HIDDEN PASTURE
MT-076-022

Paved Road
Dirt Road
WSA Boundary

LAND STATUS

Forest Service
State
BLM
Private


R 11 W
R 10 W
R 10 W
R 9 W
T 12 S
T 13 S
T 13 S
T 14 S
0039
0022
0699
I
II
III
IV
VI
VIII
X
XI
XIV
HIDDEN
1 0 1 2 Miles
N
HIDDEN PASTURE
MT-076-022
Paved Road
Dirt Road
WSA Boundary
Allotment Management Plan
Proposed Allotment Management Plan
Vehicle Way
Proposed Fenceline
Fenceline
DEVELOPMENTS AND ALLOTMENTS
Pipeline
Proposed Pipeline
Proposed Burn
Proposed Retention Dam
Developed Spring with Artificial Watershed
Developed Spring
Proposed Developed Spring
M Mineral Site
Exclosure

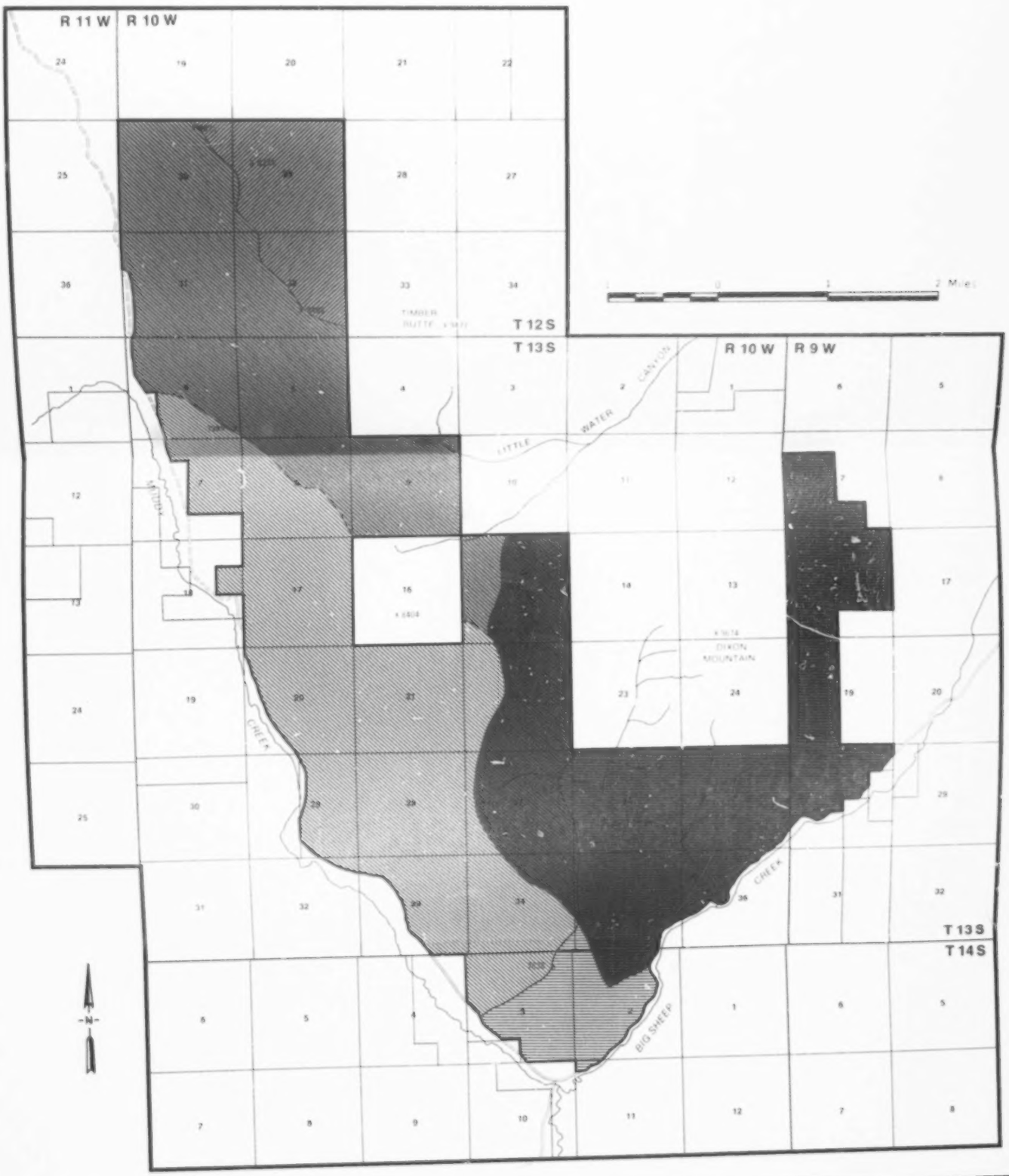


HIDDEN PASTURE
MT-076-022

Paved Road
Dirt Road
WSA Boundary

ECOTYPES
(Bailey-Kuchler System)

11 Douglas Fir Forest
49 Sagebrush Steppe
56 Foothills, Prairie



HIDDEN PASTURE
MT-076-022

Paved Road
Dirt Road
WSA Boundary

VISUAL RESOURCES

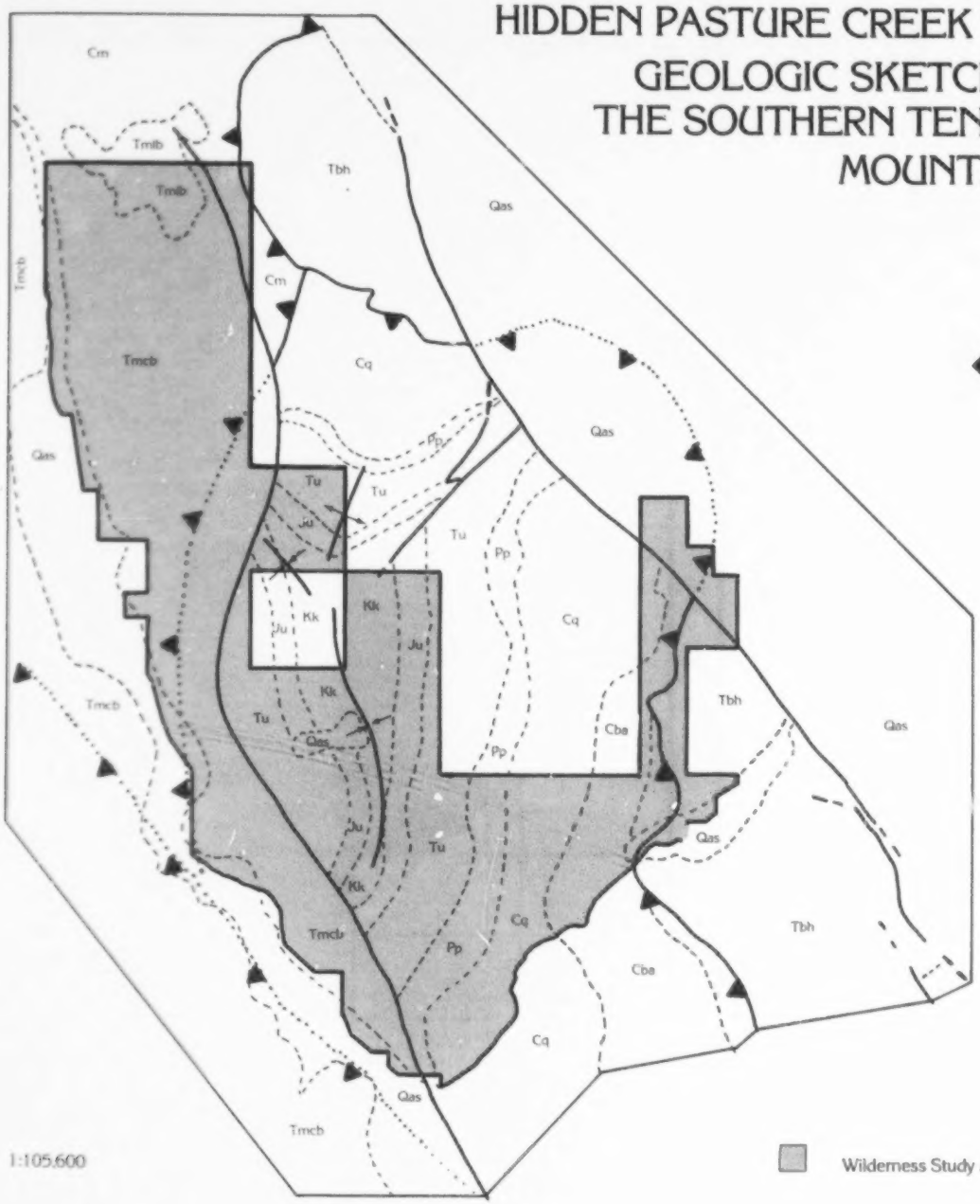
Scenic Quality Classes

- Class A — Outstanding Scenic Values
- Class B — Above Average Scenic Values
- Class C — Average Scenic Values

Visual Resource Management Classes

- Class II — Retention of Landscape Characteristics (no evident changes allowed)
- Class III — Partial Retention of Landscape Characteristics (no dominant changes allowed)
- Class IV — Modification of Landscape Characteristics (dominant changes allowed)

HIDDEN PASTURE CREEK WSA
GEOLOGIC SKETCH OF THE SOUTHERN TENDOY MOUNTAINS



Qas Quaternary

Tmlb Medicine Lodge beds

Tmcb Muddy Creek beds — Tertiary

Tbh Beaverhead Fm

Ka Aspen Fm

Kk Kootenai Fm — Cretaceous

Ju Jurassic undiff

Tu Triassic undiff

Pp Phosphoric Fm

Quadrant Fm — Carboniferous

Cba Big Snowy and Amsden Fms

Cu Mississippian undiff

Cm Madison Group Mission

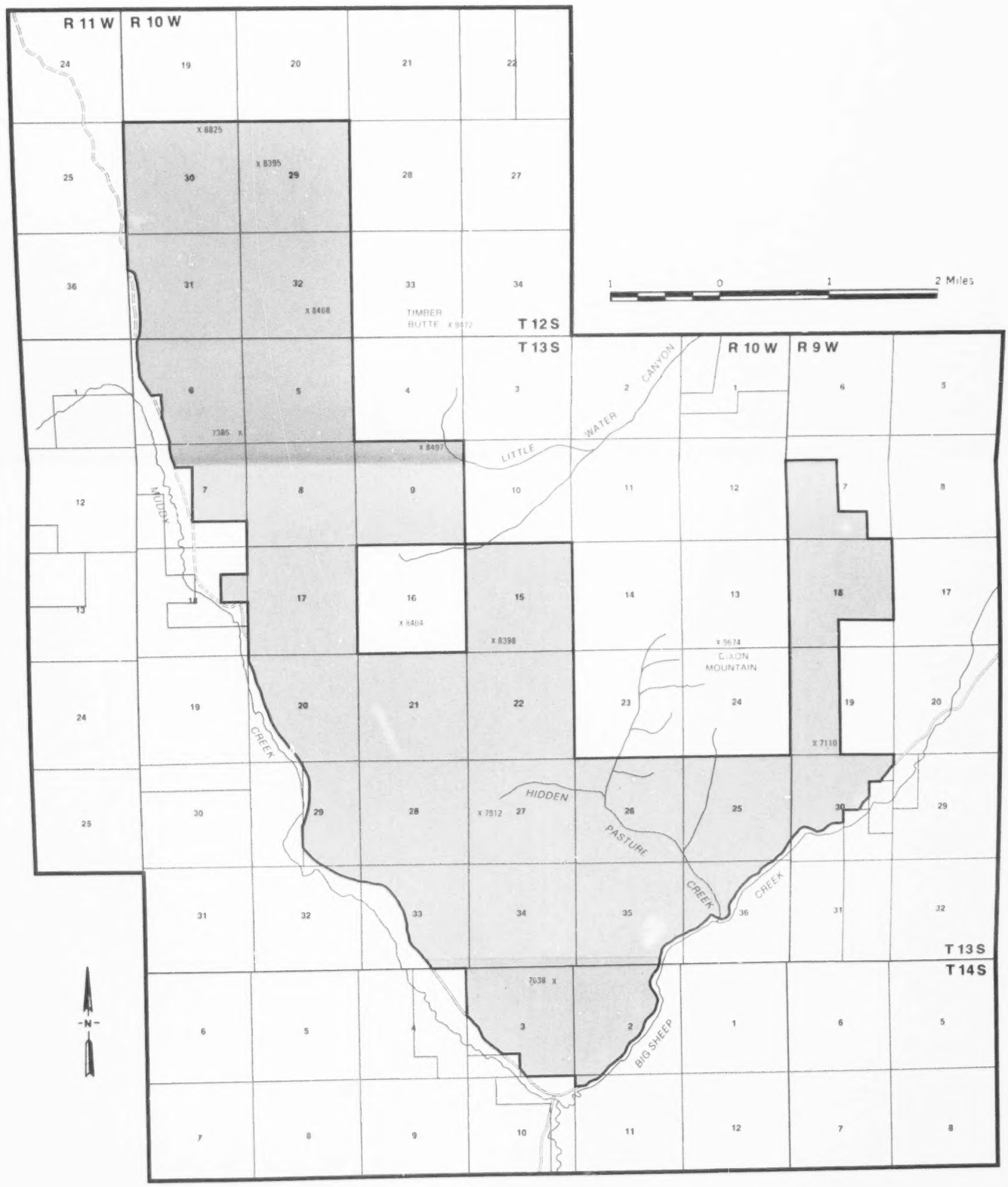
pCd Dillon Gneiss — Precambrian

Normal fault

Thrust fault

Anticline

Syncline



HIDDEN PASTURE
MT-076-022

MINING CLAIMS AND MINERAL LEASES

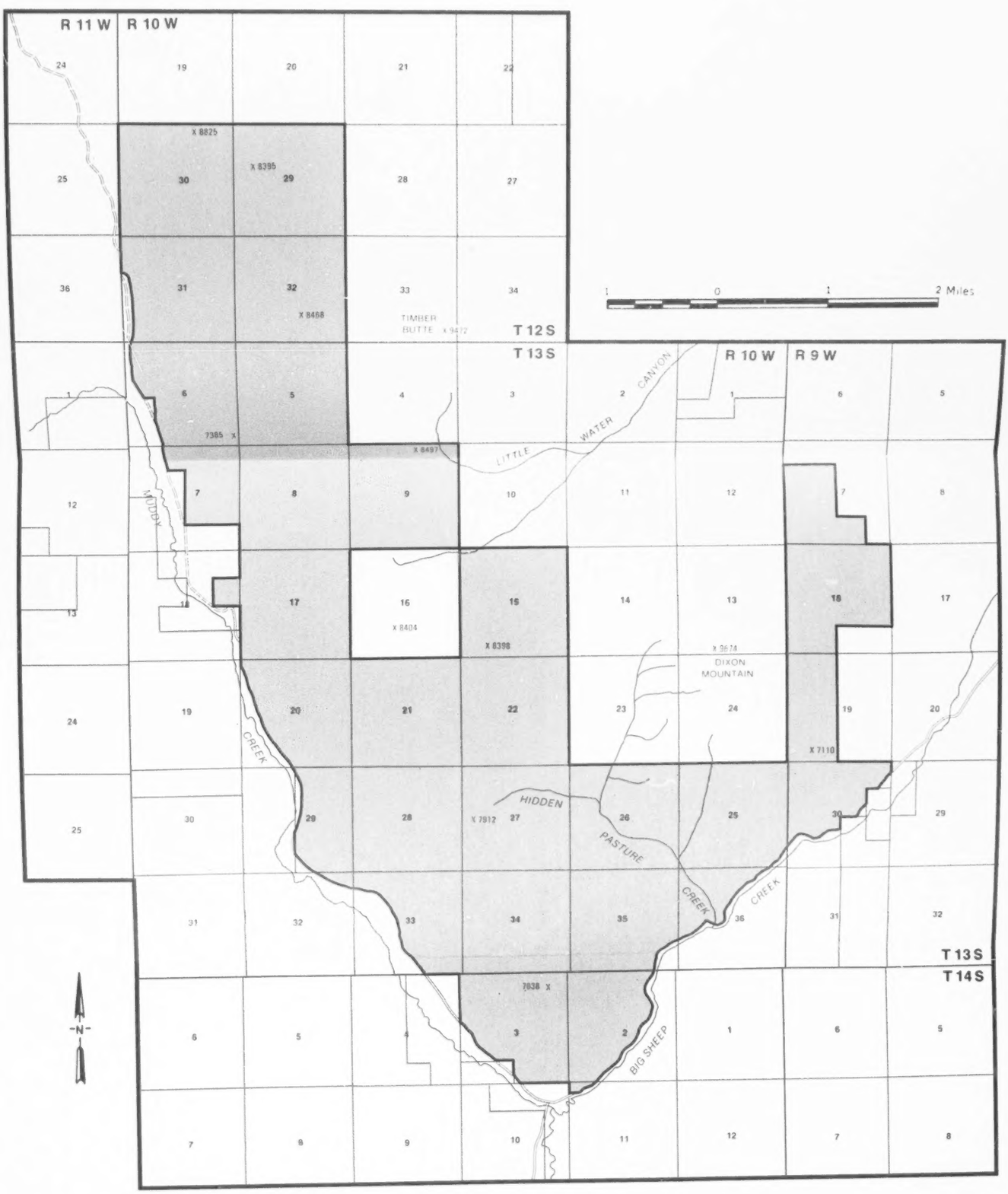
Paved Road
Dirt Road
WSA Boundary

(NONE) Post FLPMA Leases*

Oil and Gas Leases
Pre FLPMA Leases

*Includes lease applications and leases in simultaneous lottery

(NONE) Mining Claims



HIDDEN PASTURE
MT-076-022

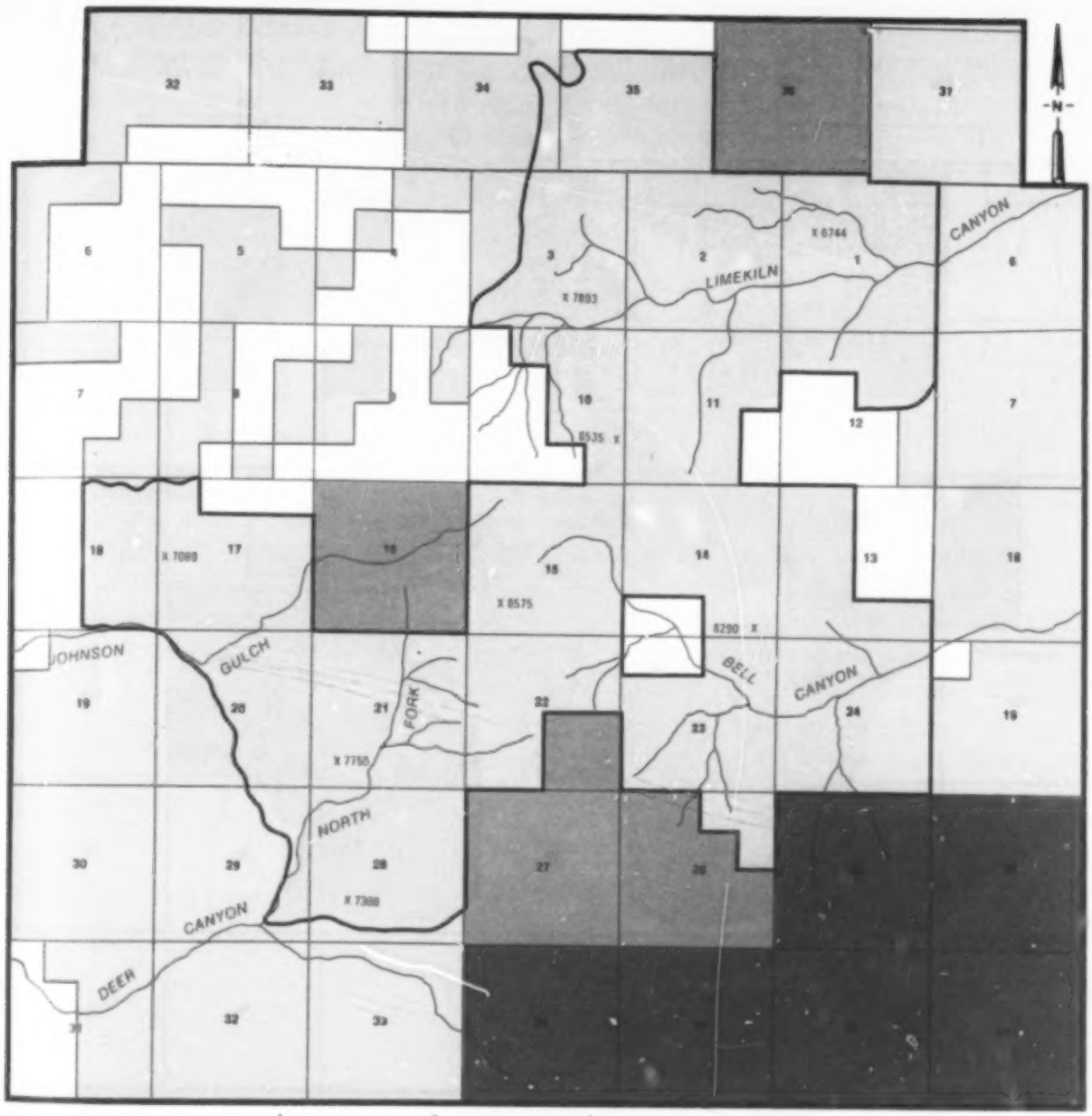
Paved Road
Dirt Road
WSA Boundary

ALTERNATIVES

HP-1 All Wilderness

HP-2 No Wilderness (no portion designated as wilderness)

Bell and Limekiln Canyons WSA
MT-076-026



BELL-LIMEKILN
MT-076-026

LAND STATUS

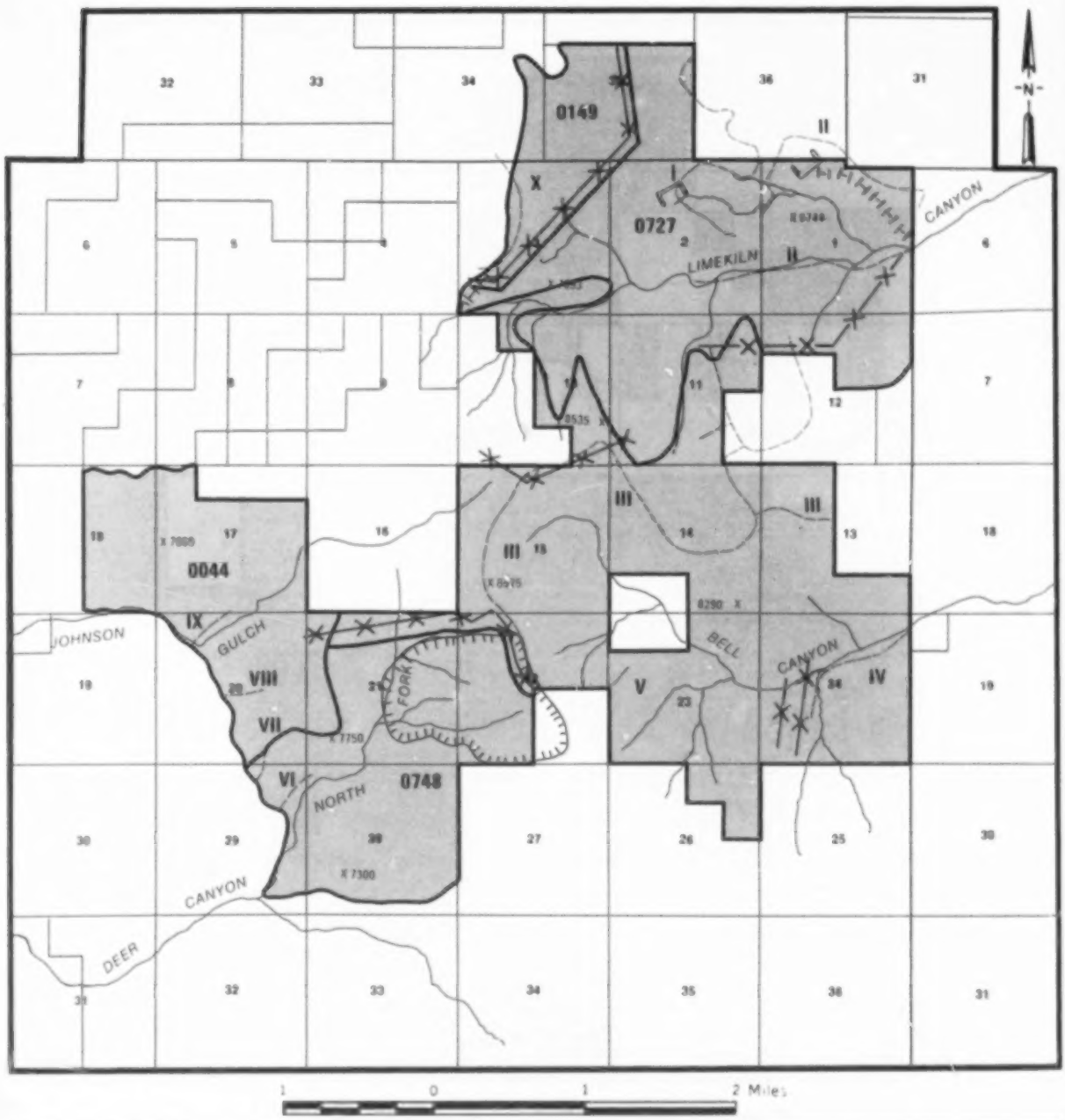
WSA Boundary

Forest Service

State

BLM

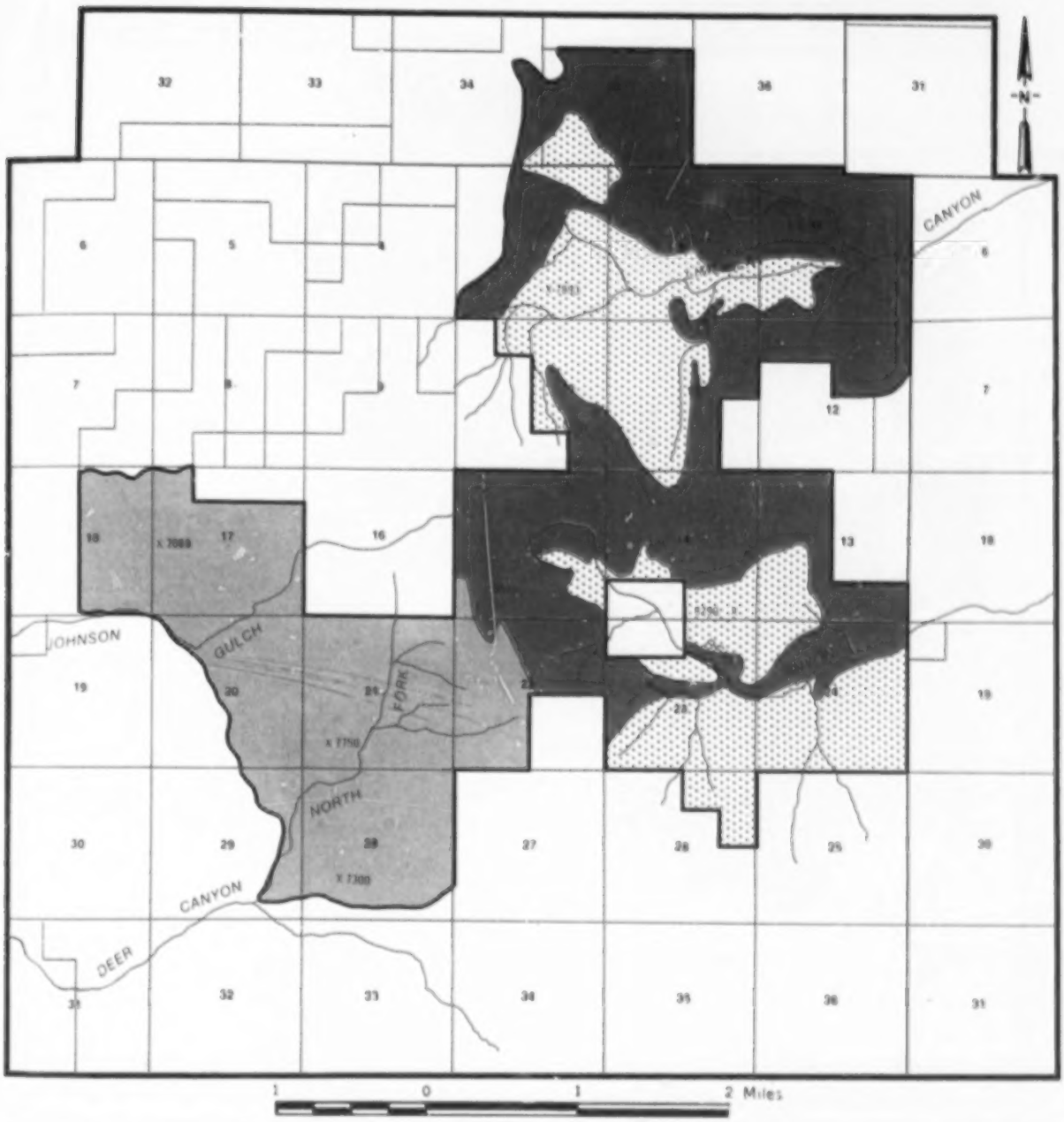
Private



BELL-LIMEKILN
MT-076-026

DEVELOPMENTS AND ALLOTMENTS

- Proposed Allotment Management Plan
- Proposed Burn
- WSA Boundary
- Fenceline
- Pipeline
- Proposed Fenceline
- Proposed Pipeline
- Vehicle Way



BELL-LIMEKILN
MT-076-026

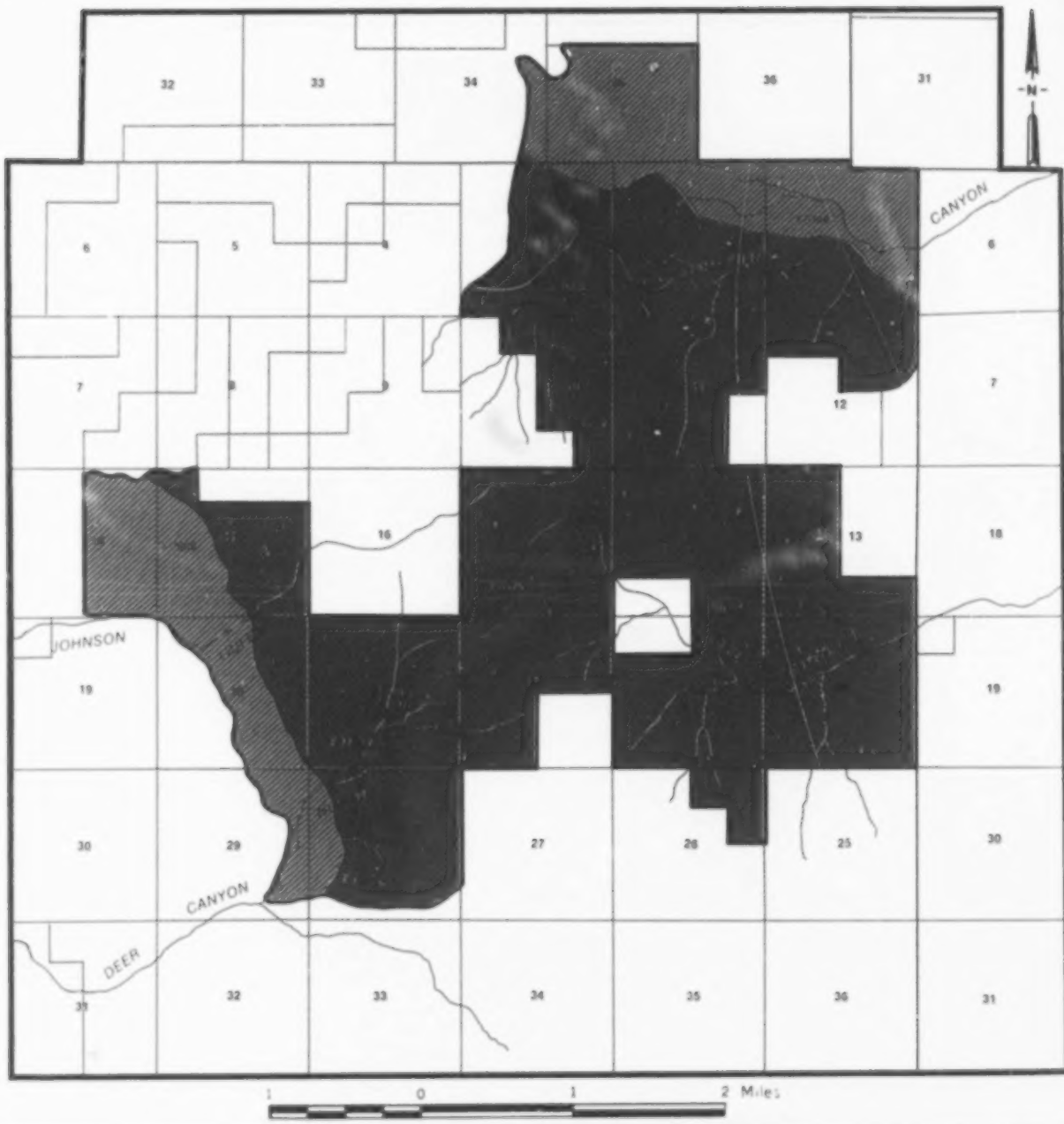
ECOTYPES
(Bailey-Kuchler System)

WSA Boundary

11 Douglas Fir Forest

49 Sagebrush Steppe

56 Foothills, Prairie



BELL-LIMEKILN
MT-076-026

VISUAL RESOURCES

Scenic Quality Classes

Class A — Outstanding Scenic Values

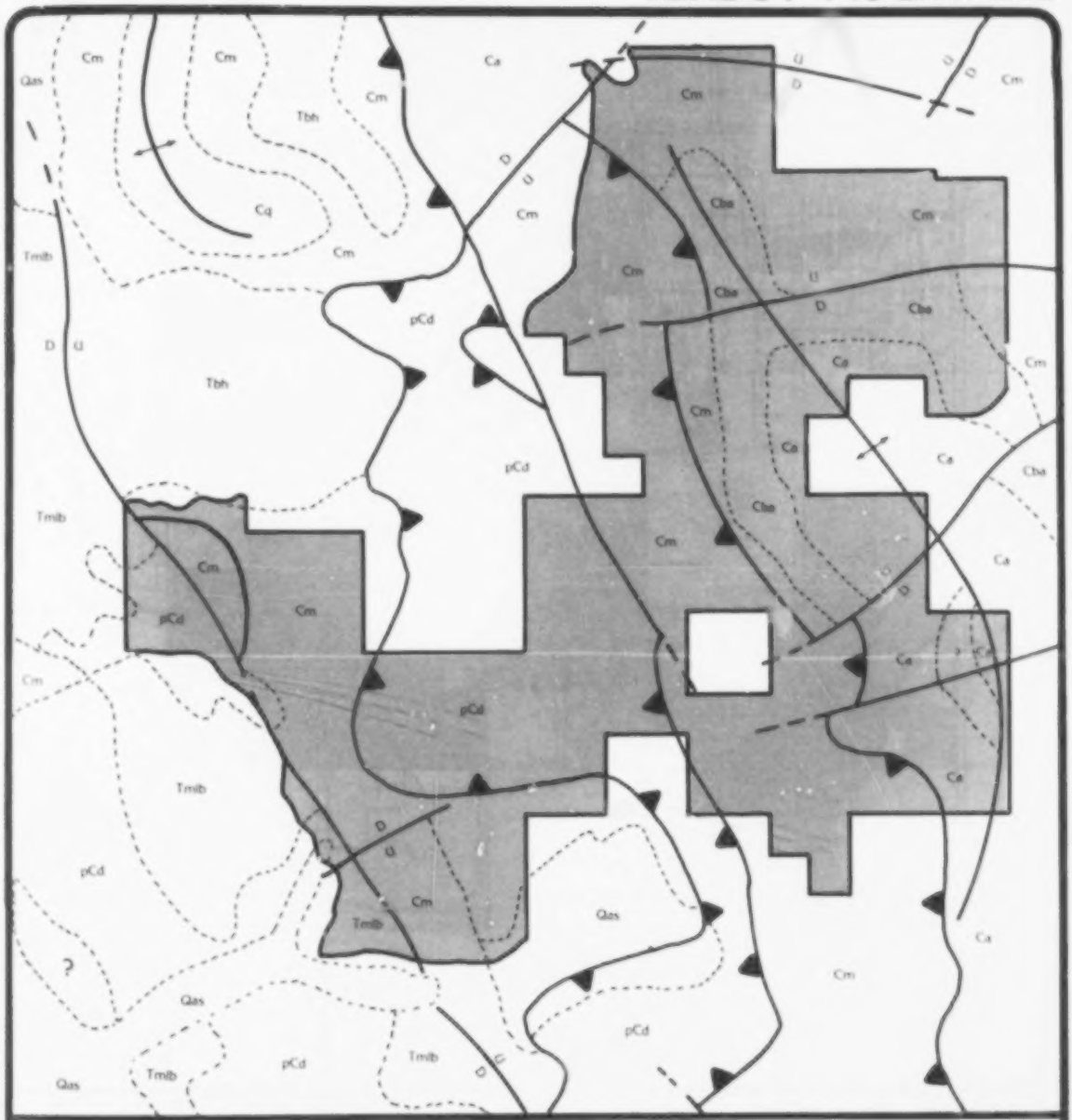
Class B — Above Average Scenic Values

WSA Boundary

Visual Resource Management Classes

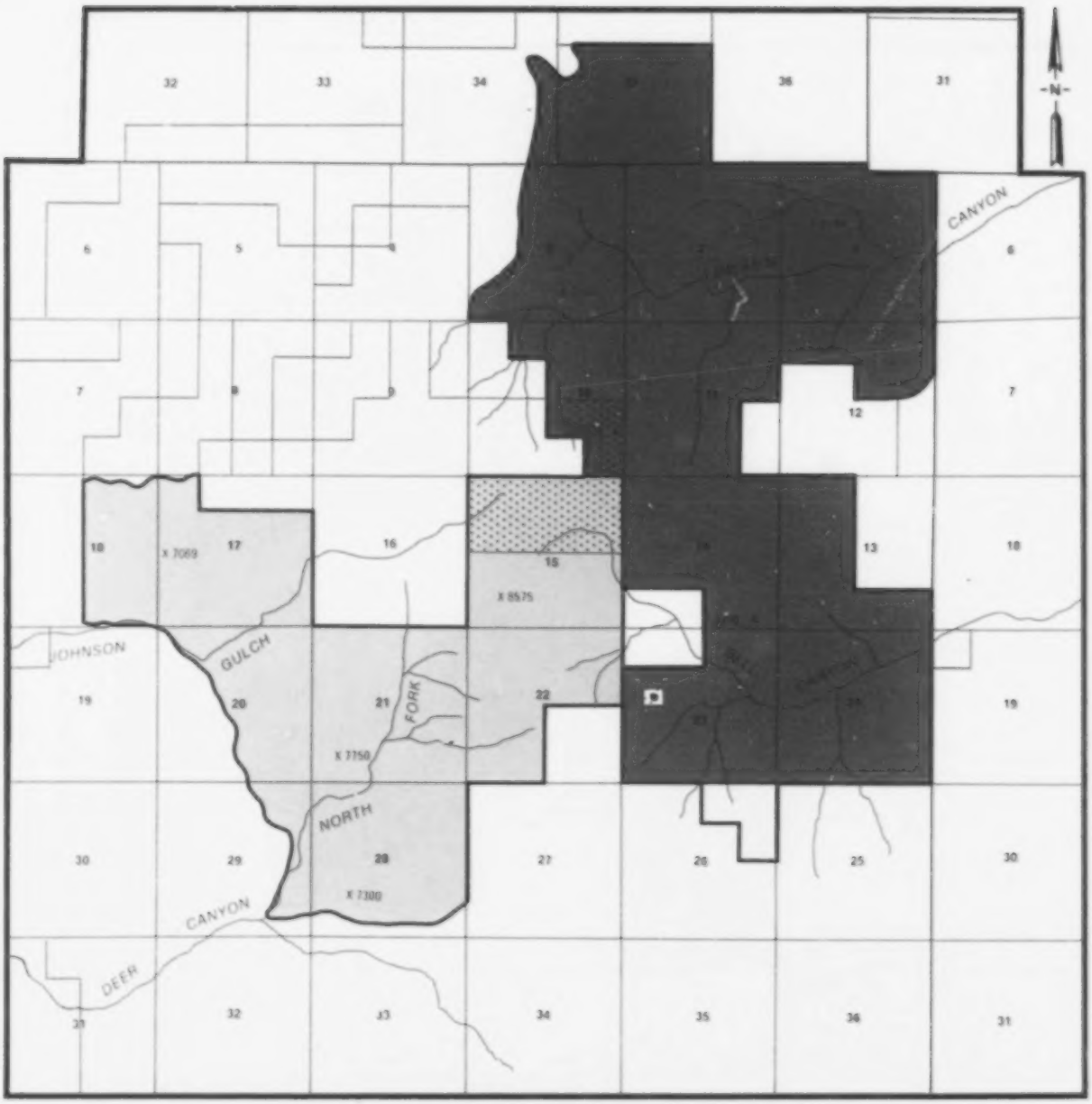
Class III — Partial Retention of Landscape Characteristics (no dominant changes allowed)

BELL-LIMEKILN WSA
GEOLOGIC SKETCH OF THE NORTHERN TENDOY MOUNTAINS



Qas	Quaternary	Ju Jurassic undiff		Cm Madison Group-Mission	Carboniferous
Tmlb Medicine Lodge beds		Tu Triassic undiff		pCd Dillon Gneiss	Precambrian
Tmcb Muddy Creek beds	Tertiary	Pp Phosphoria Fm			
Tbh Beaverhead Fm		Ca Quadrant Fm	Carboniferous		Wilderness Study Area
Ka Aspen Fm	Cretaceous	Cbe Big Snowy and Amsden Fms		U / D	Normal fault / Thrust fault
Kk Kootenai Fm		Cu Mississippian undiff			Anticline / Syncline

1:63,360



BELL-LIMEKILN
MT-076-026

MINING CLAIMS AND MINERAL LEASES

WSA Boundary

Oil and Gas Leases

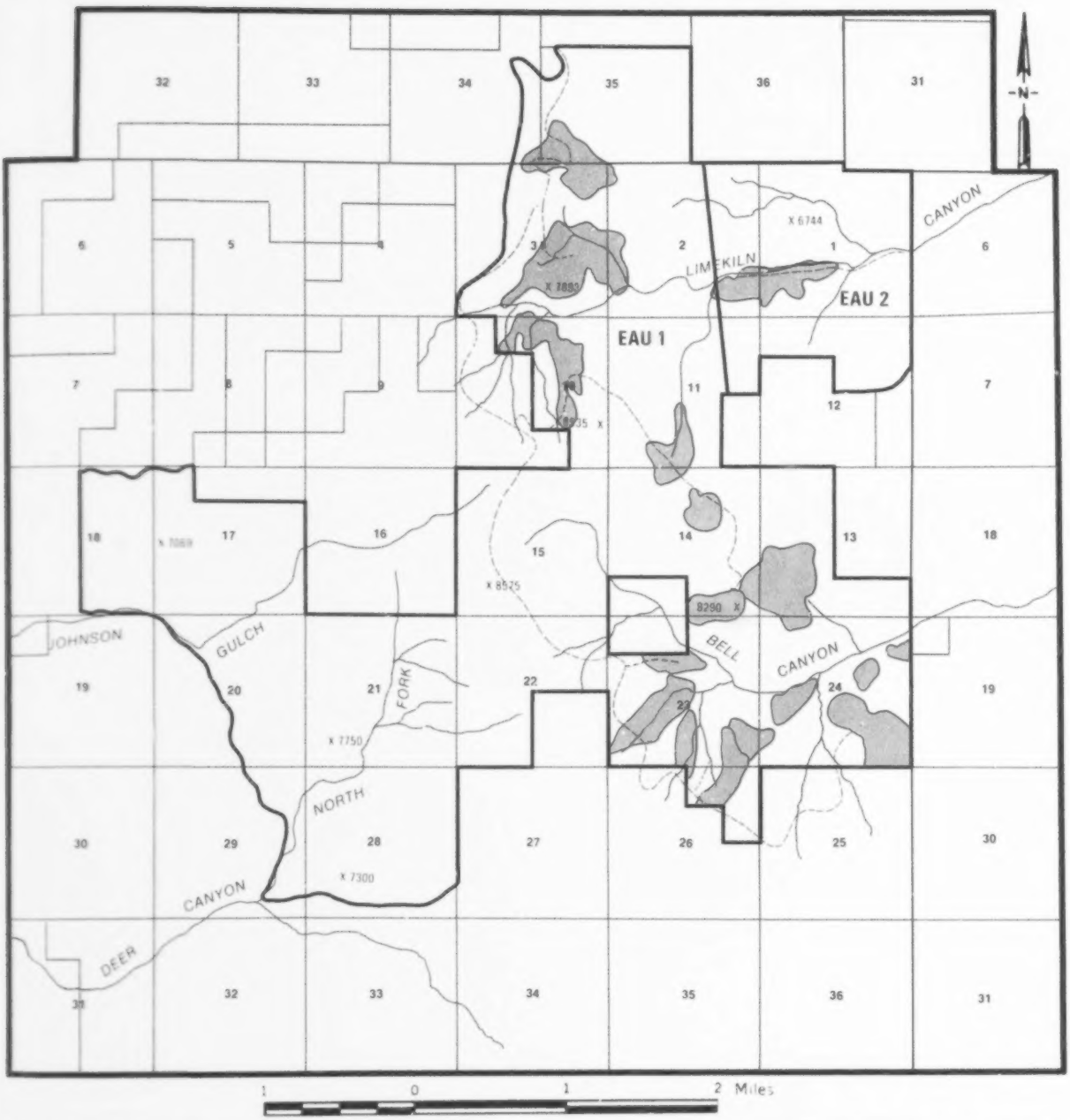
Post FLPMA Leases*

Pre FLPMA Leases

Mining Claims

Conoco ADP

*Includes lease applications and leases in simultaneous lottery



BELL-LIMEKILN
MT-076-026

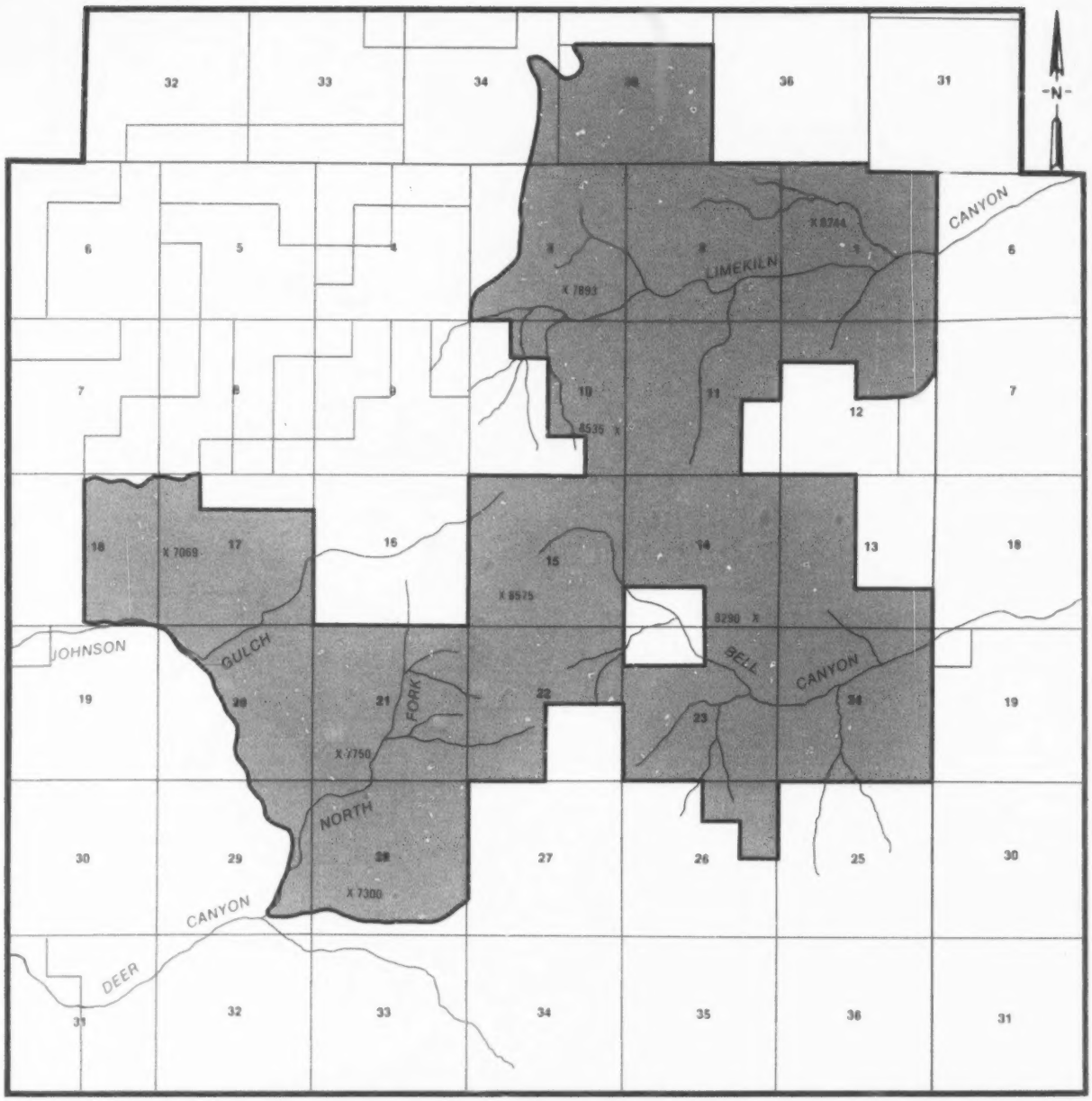
TIMBER MANAGEMENT

EAU Economic Analysis Unit

Commercial Timber

WSA Boundary

Proposed Road



BELL-LIMEKILN
MT-076-026

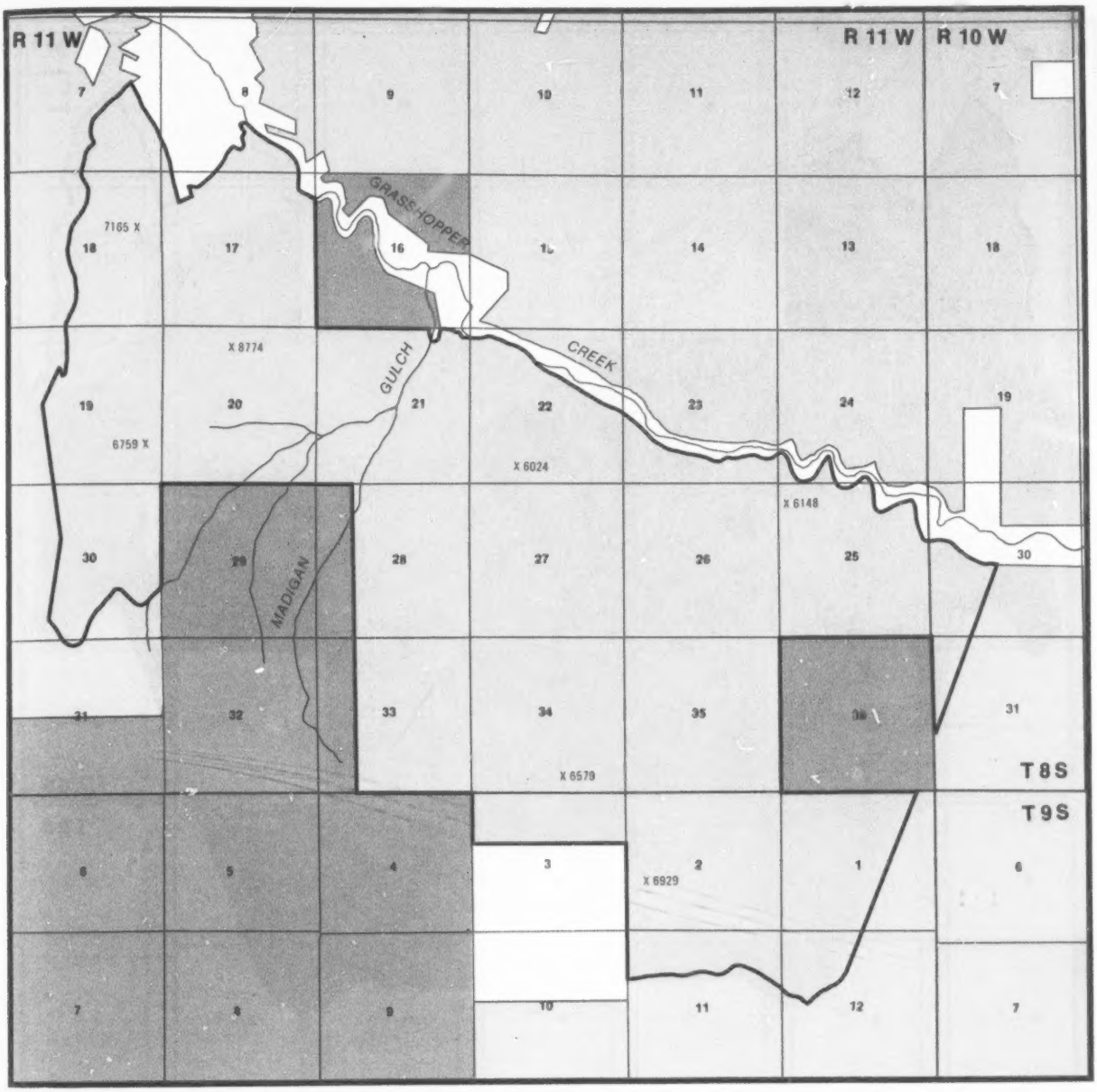
ALTERNATIVES

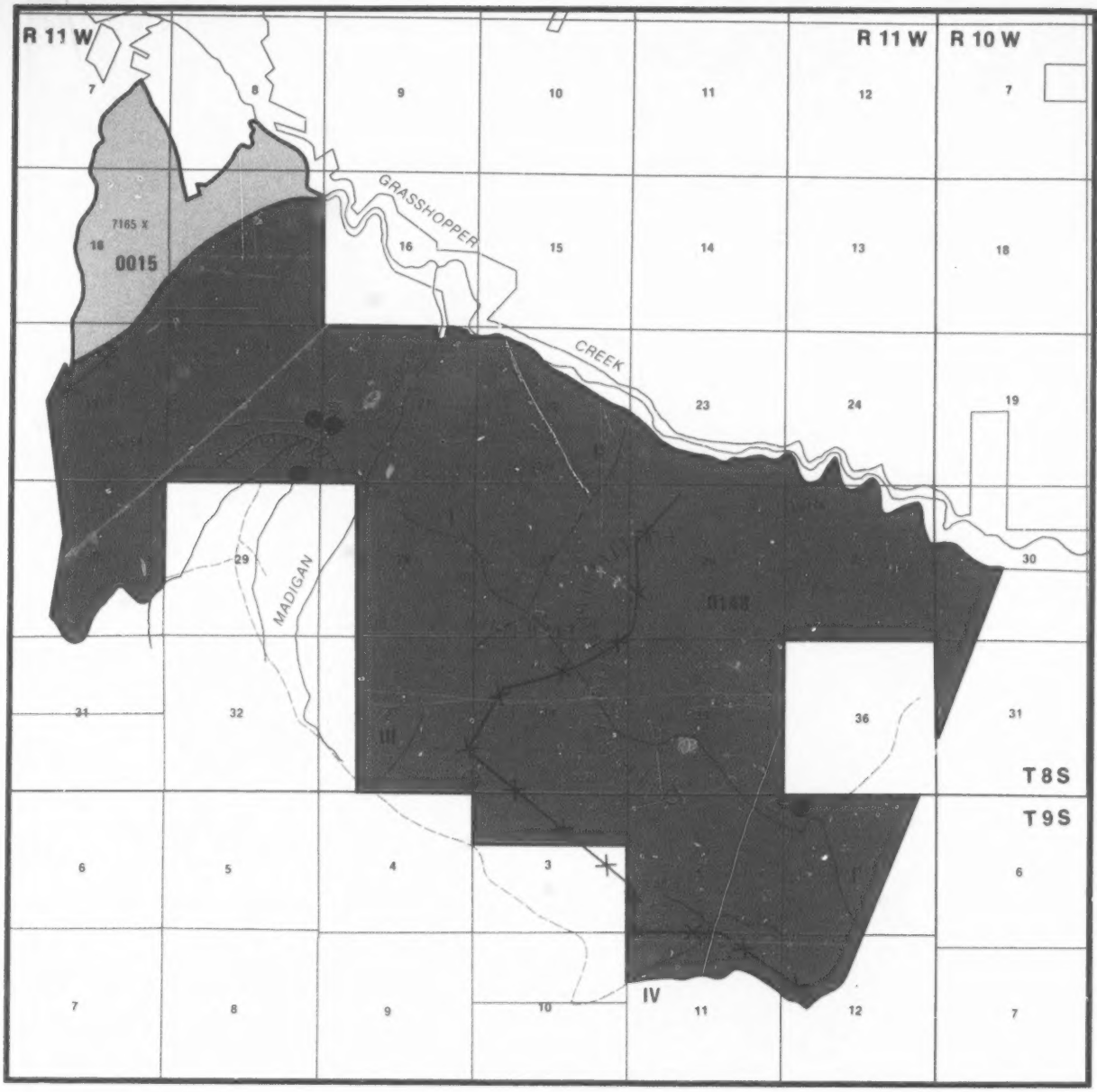
WSA Boundary

BL-1 All Wilderness

BL-2 No Wilderness (no portion designated as wilderness)

Henneberry Ridge WSA
MT-076-028


R 11 W
R 11 W
R 10 W
GRASSHOPPER
GULCH
CREEK
MADIGAN
7165 X
X 8774
6759 X
X 6024
X 6148
X 6579
X 6929
T8S
T9S
1 0 1 2 3 Miles
HENNEBERRY RIDGE
MT-076-028
WSA Boundary
-N-
LAND STATUS
State
BLM
Private



HENNEBERRY RIDGE
MT-076-028

DEVELOPMENTS AND ALLOTMENTS

WSA Boundary

-N-

Allotment Management Plan

Proposed Allotment Management Plan

Fenceline

Proposed Fenceline

Proposed Burn

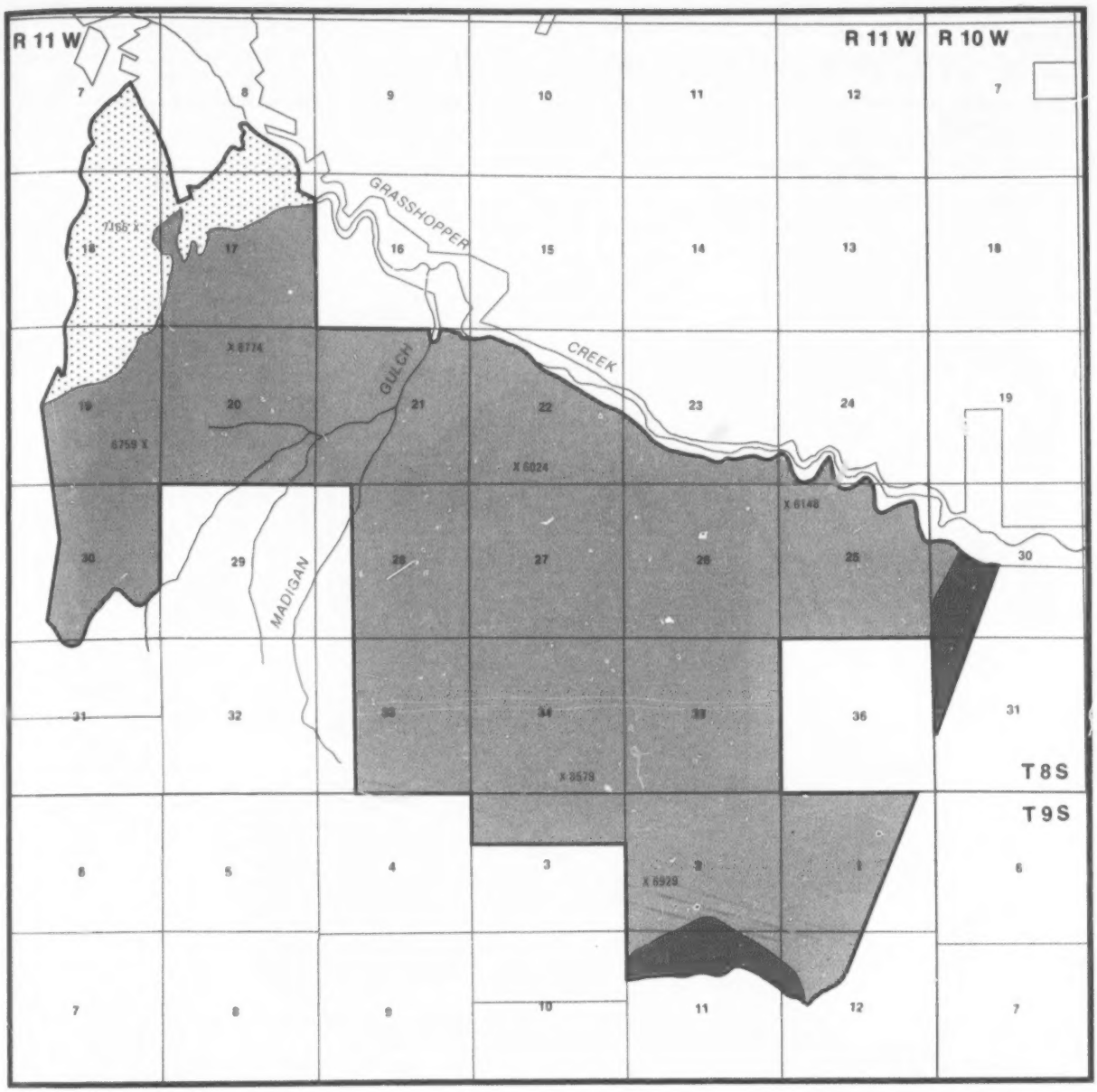
Developed Spring

Vehicle Way

Proposed Pipeline

Reservoir

Proposed Well and Windmill



HENNEBERRY RIDGE
MT-076-028

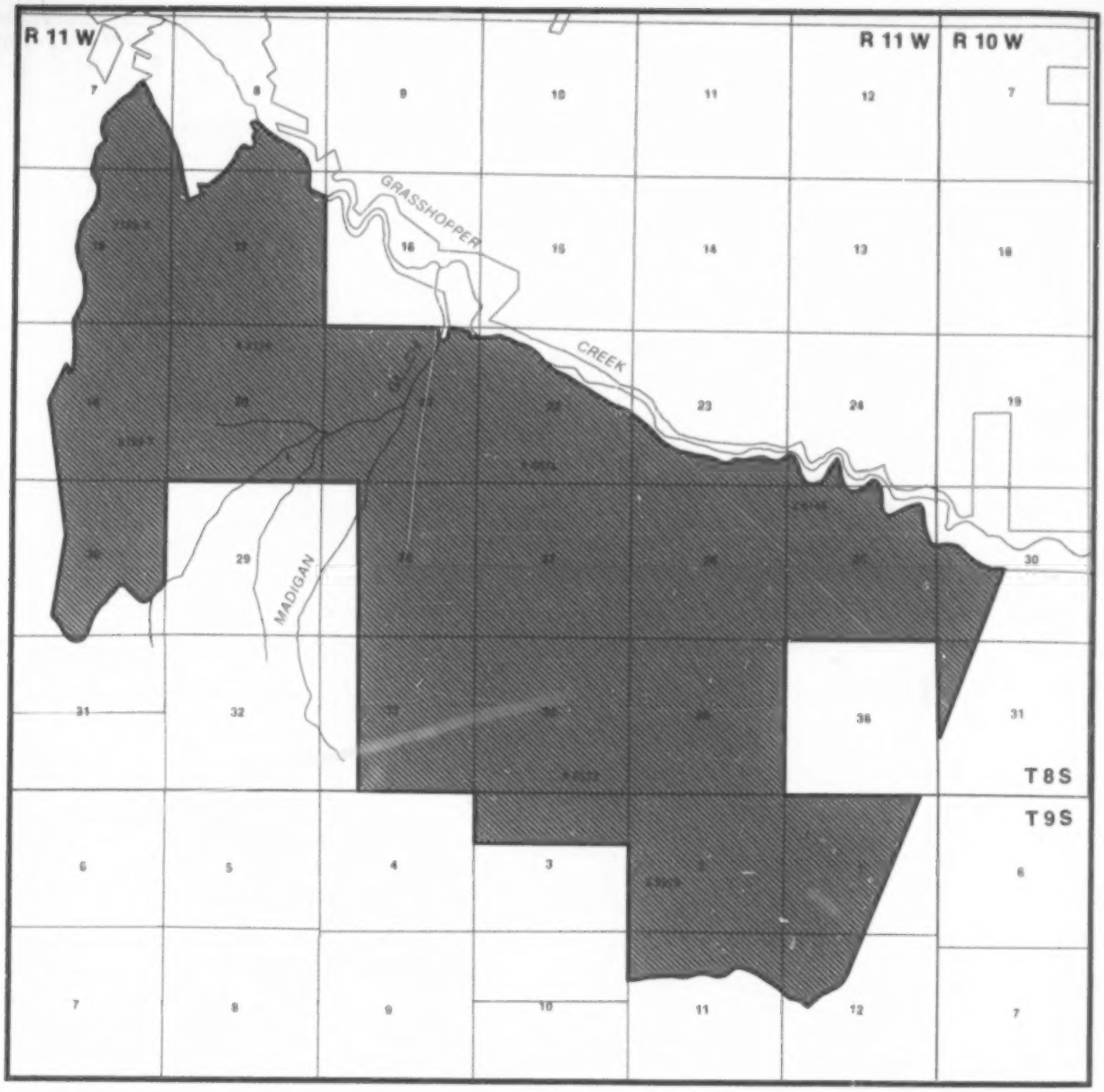
WSA Boundary

ECOTYPES
(Bailey—Kuchler System)

11 Douglas Fir Forest

49 Sagebrush Steppe

56 Foothills, Prairie



HENNEBERRY RIDGE
MT-076-028

WSA Boundary

-N-

VISUAL RESOURCES

Scenic Quality Class

Class B — Above Average Scenic Values

Visual Resource Management Class

Class IV — Modification of Landscape Characteristics (dominant changes allowed)

HENNEBERRY RIDGE WSA
GEOLOGIC MAP OF THE BANNACK-GRAYLING AREA

Wilderness Study Area

Ta Andesitic Volcanics

Tb Basaltic Volcanics

Pal Paleozoic Sedimentary Rocks

Tgd Granodiorite

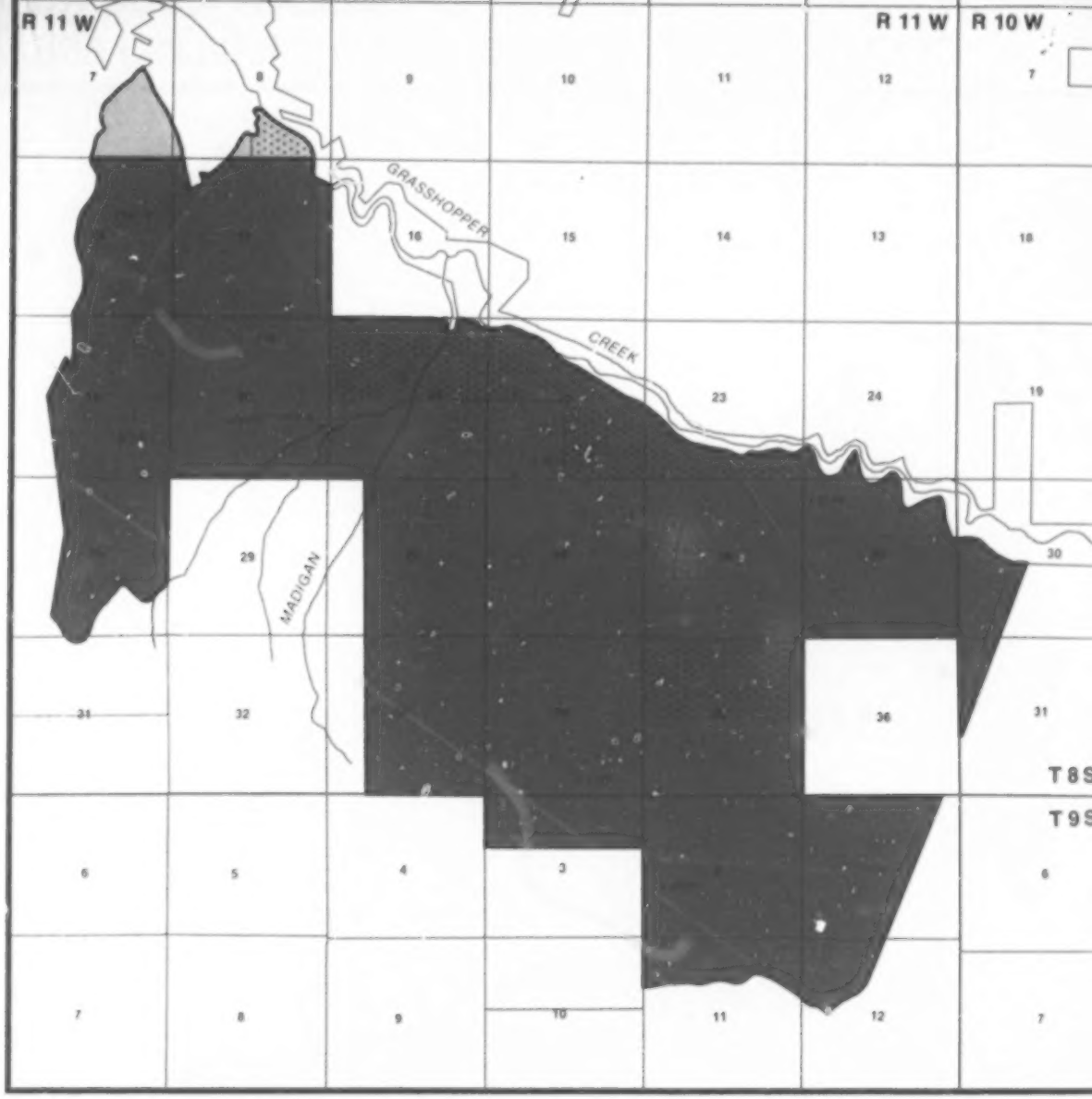
U / D Normal fault

Thrust fault

Syncline

Anticline

1:63360



HENNEBERRY RIDGE
MT-076-028

——WSA Boundary

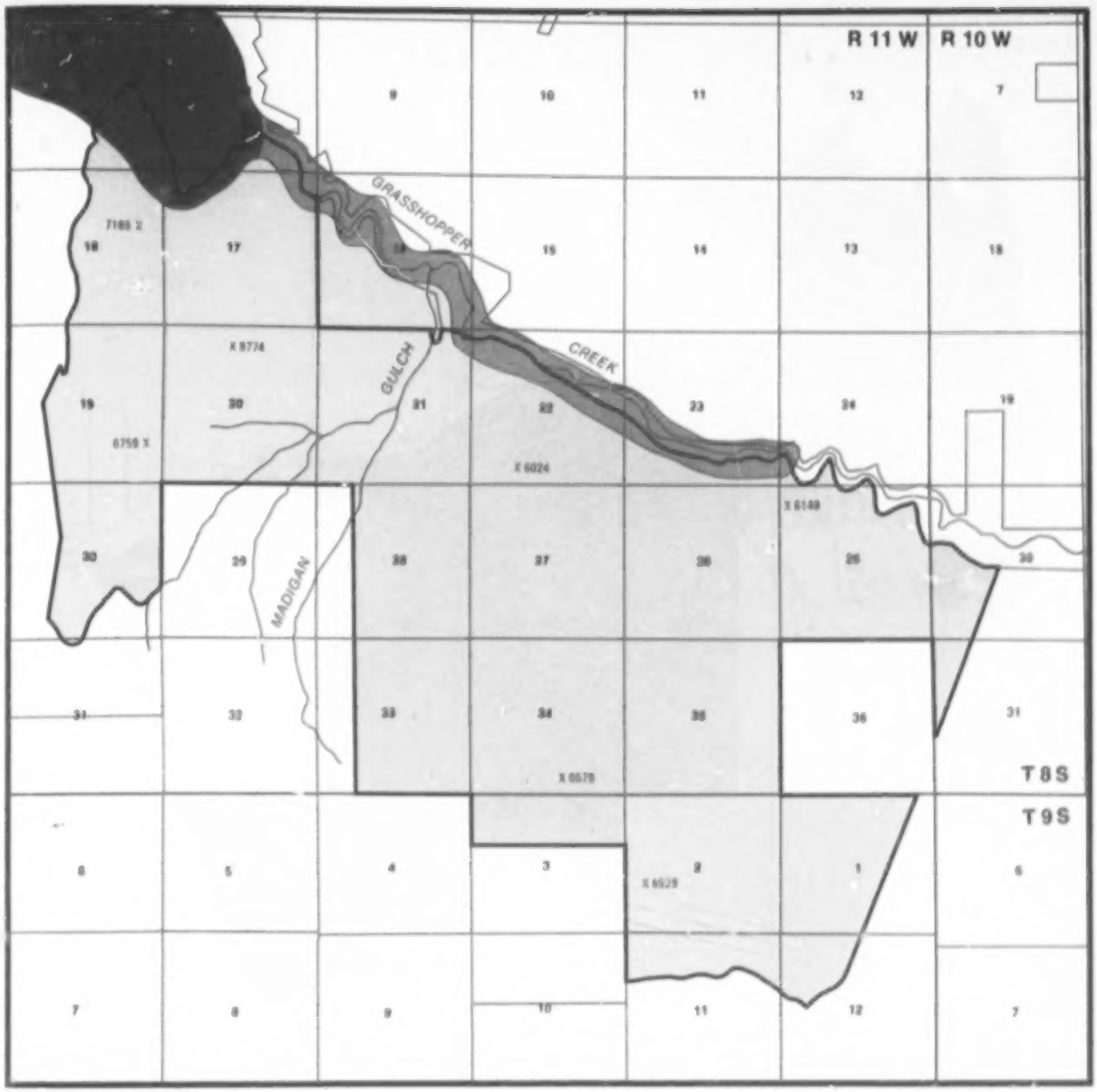
-N-

MINING CLAIMS AND MINERAL LEASES

Oil and Gas Leases

- Post FLPMA Leases*
- Pre FLPMA Leases
- Mining Claims

*Includes lease applications and leases in simultaneous lottery



1 0 1 2 3 Miles

HENNEBERRY RIDGE
MT-076-028

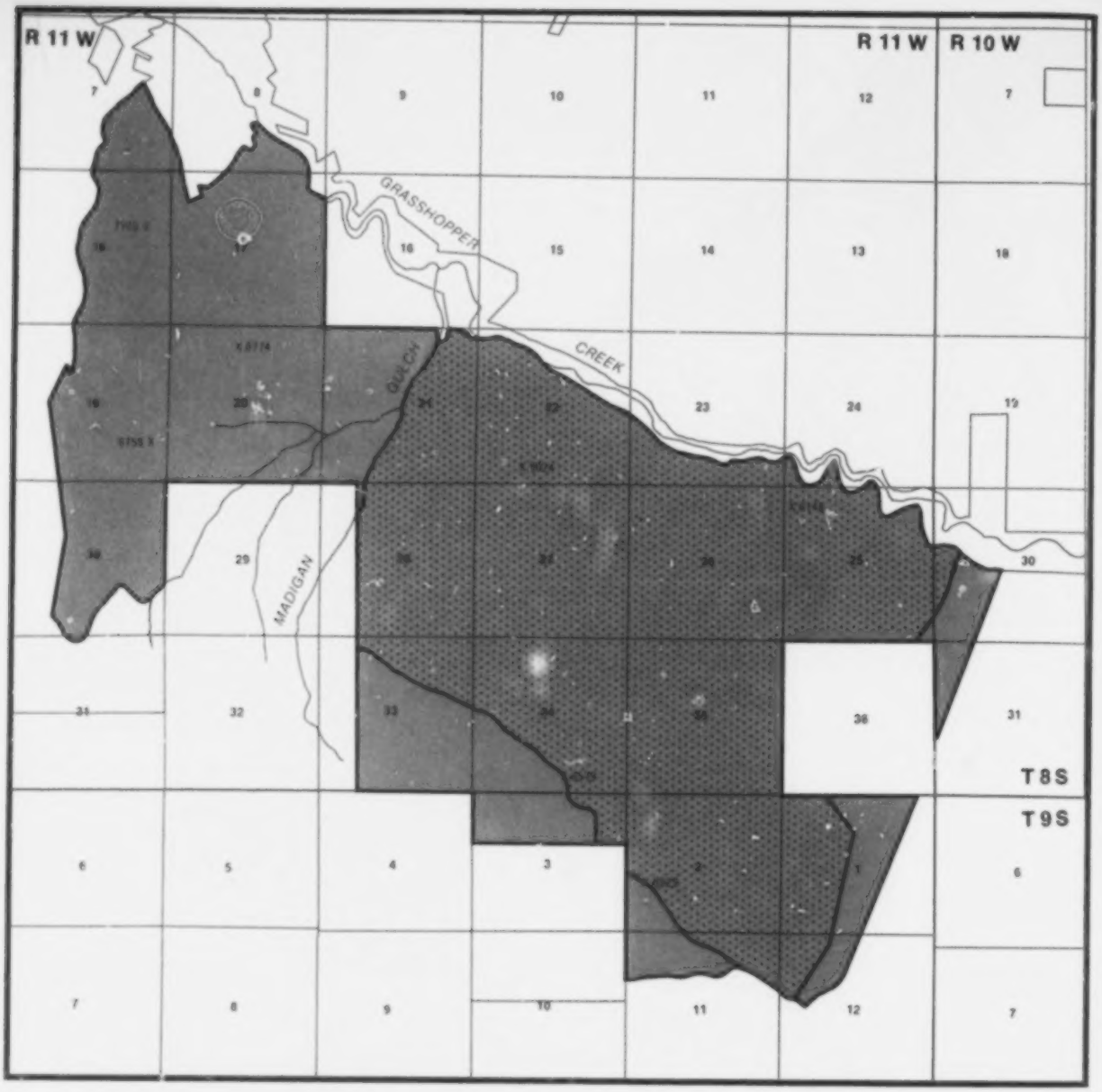
WSA Boundary

N

MINERAL POTENTIAL

Geology

- High Potential for Au
- High Potential for Placer Au
- Tertiary basalts and Paleozoic sediments – low potential



HENNEBERRY RIDGE
MT-076-028

WSA Boundary

-N-

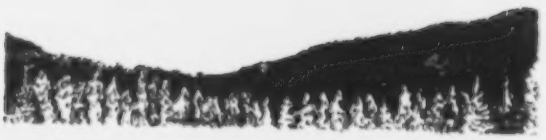
ALTERNATIVES

H-1 All Wilderness

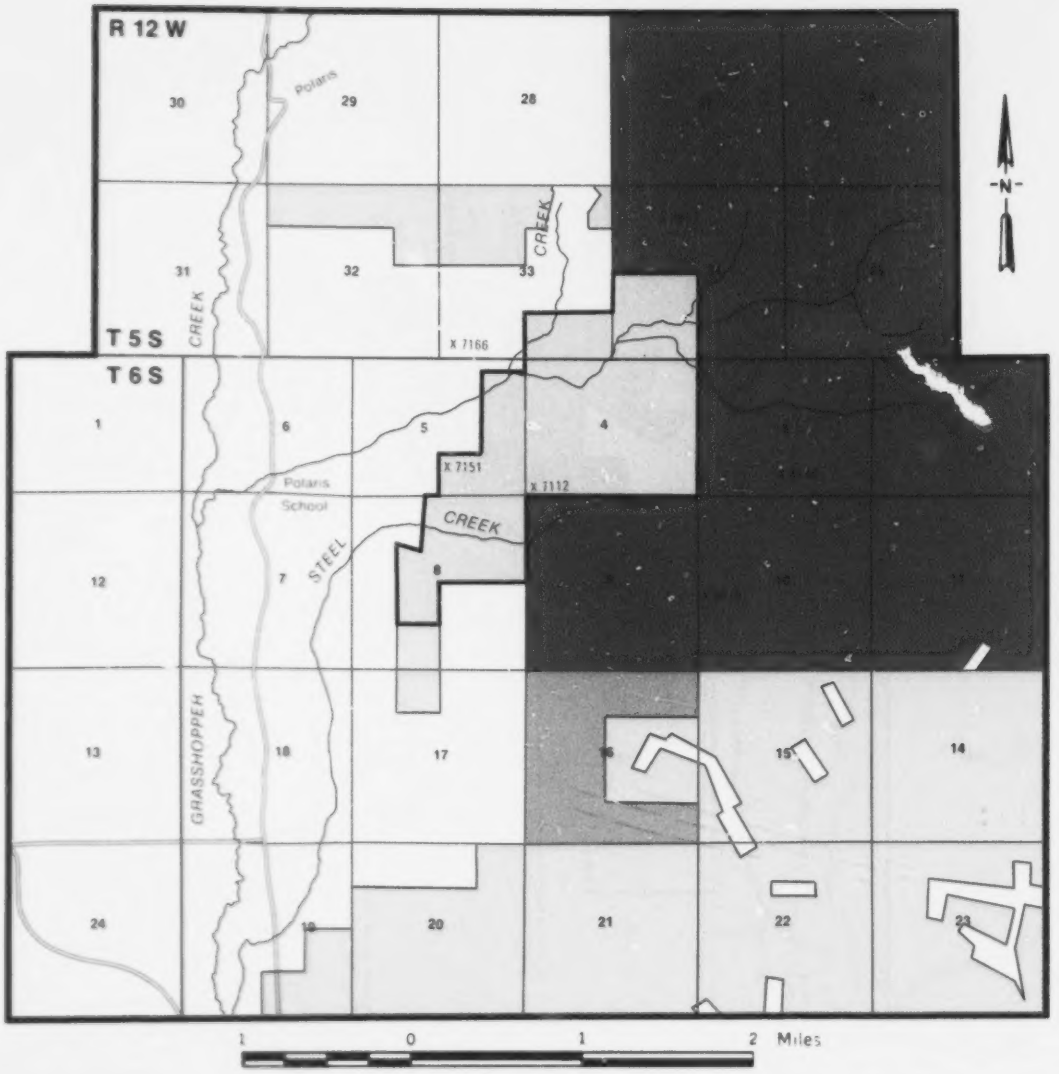
H-2 No Wilderness (no portion designated as wilderness)

H-3 Partial Wilderness

Alternative Boundary



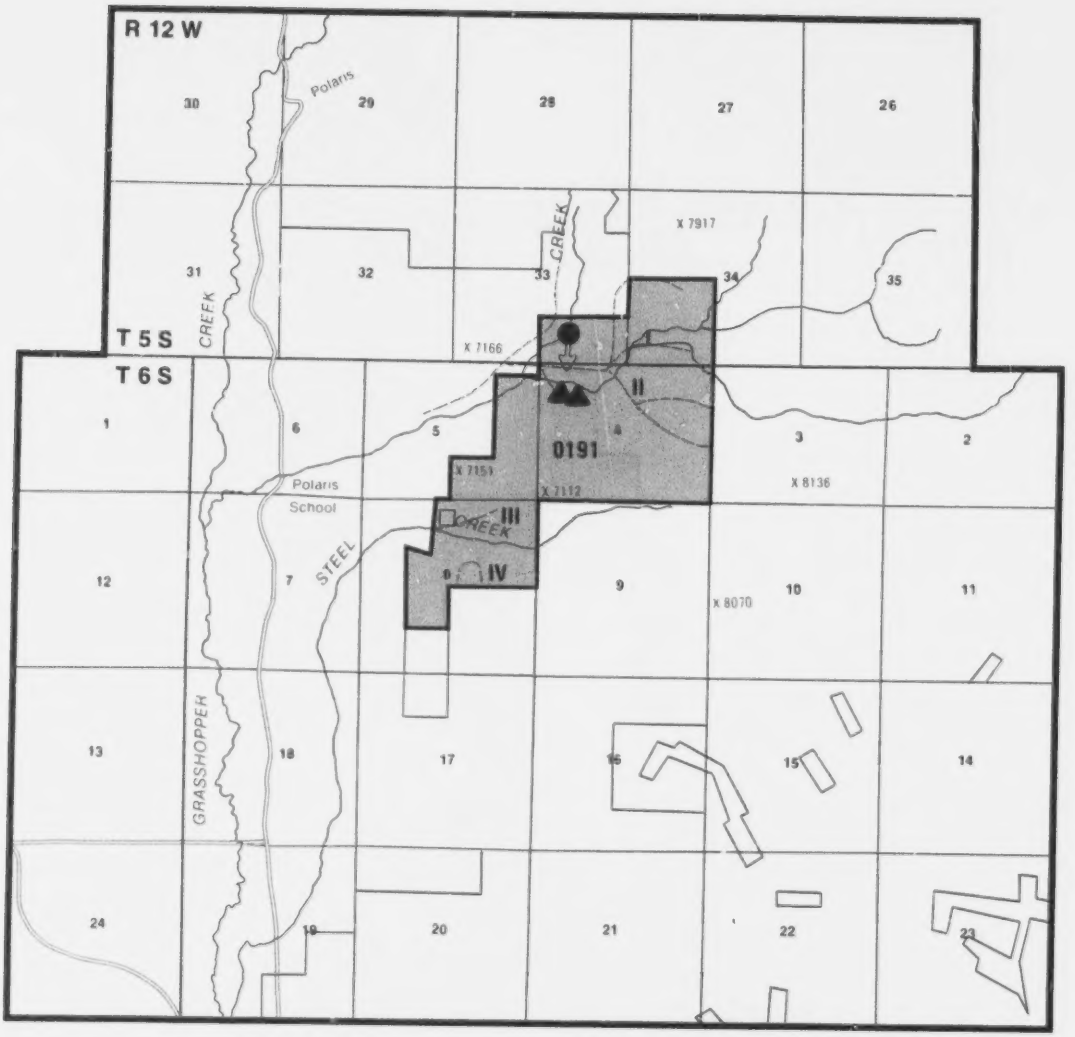
Farlin Creek WSA
MT-076-034



FARLIN CREEK
MT-076-034

LAND STATUS

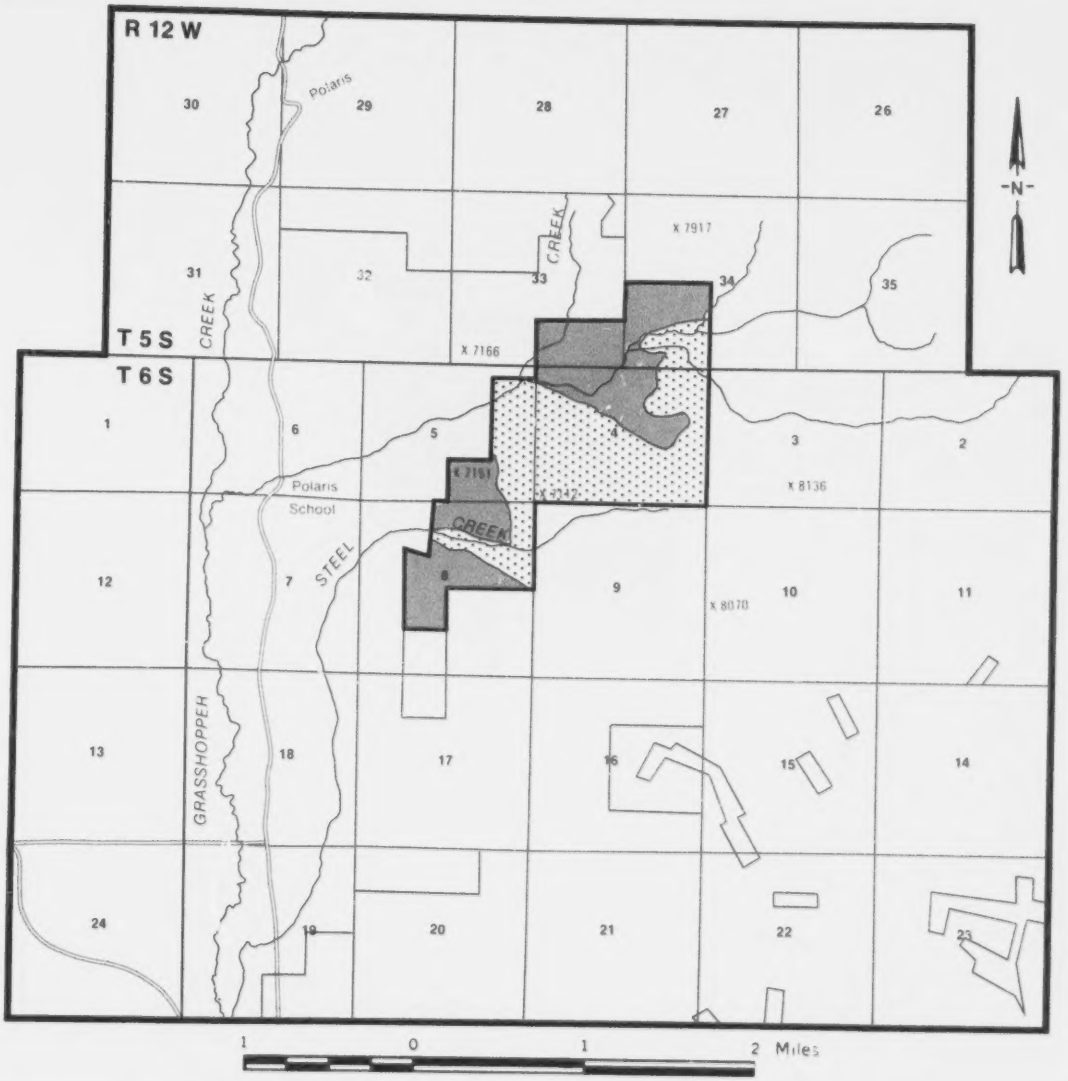
- Paved Road
- WSA Boundary
- Forest Service
- State
- BLM
- Private



FARLIN CREEK
MT-076-034

DEVELOPMENTS AND ALLOTMENTS

- Paved Road
- WSA Boundary
- Custodial
- Vehicle Way
- Old Logging Evidence
- Building
- Developed Spring



FARLIN CREEK
MT-076-034

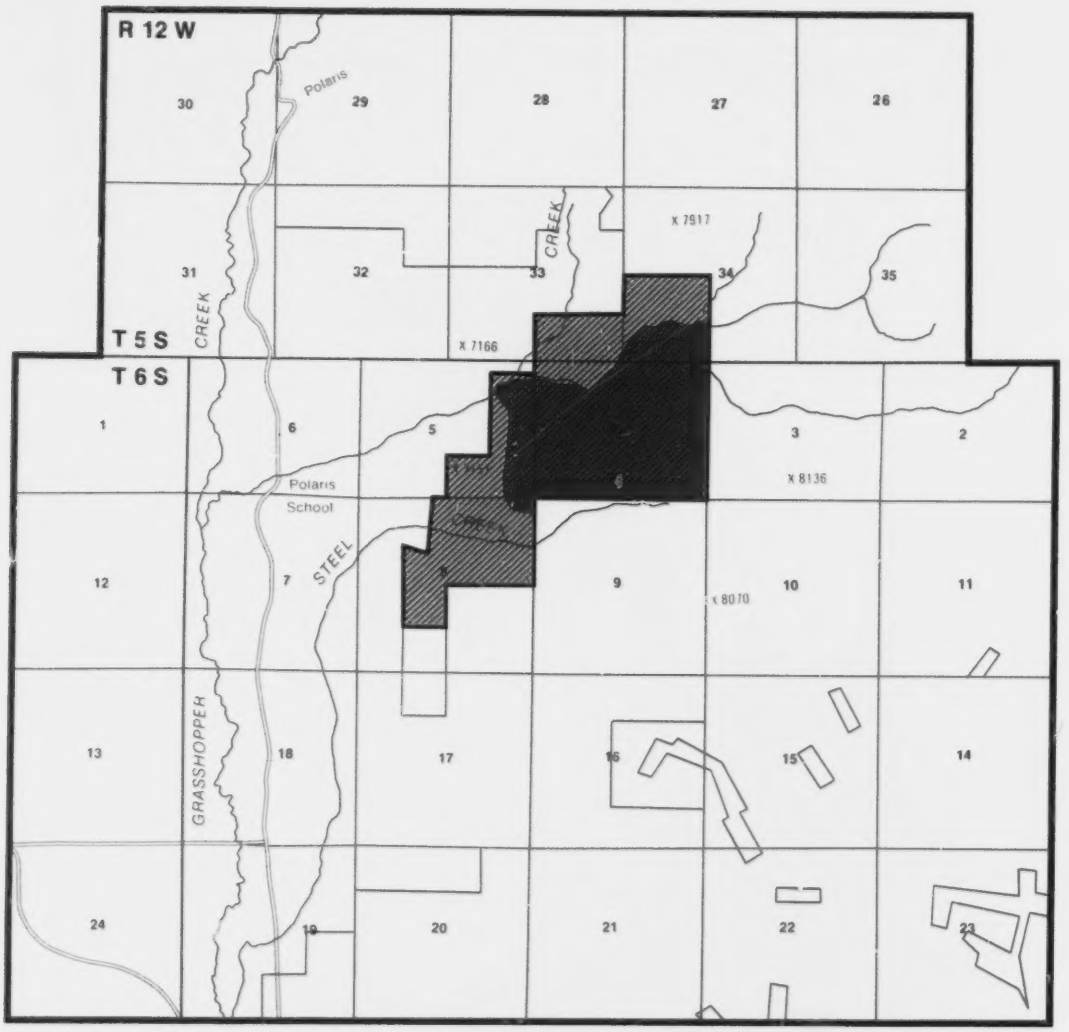
ECOTYPES
(Bailey-Kuchler System)

Paved Road

WSA Boundary

11 Douglas Fir Forest

49 Sagebrush Steppe



FARLIN CREEK
MT-076-034

VISUAL RESOURCES

Scenic Quality Classes

- **Class A — Outstanding Scenic Values**
- **Class B — Above Average Scenic Values**

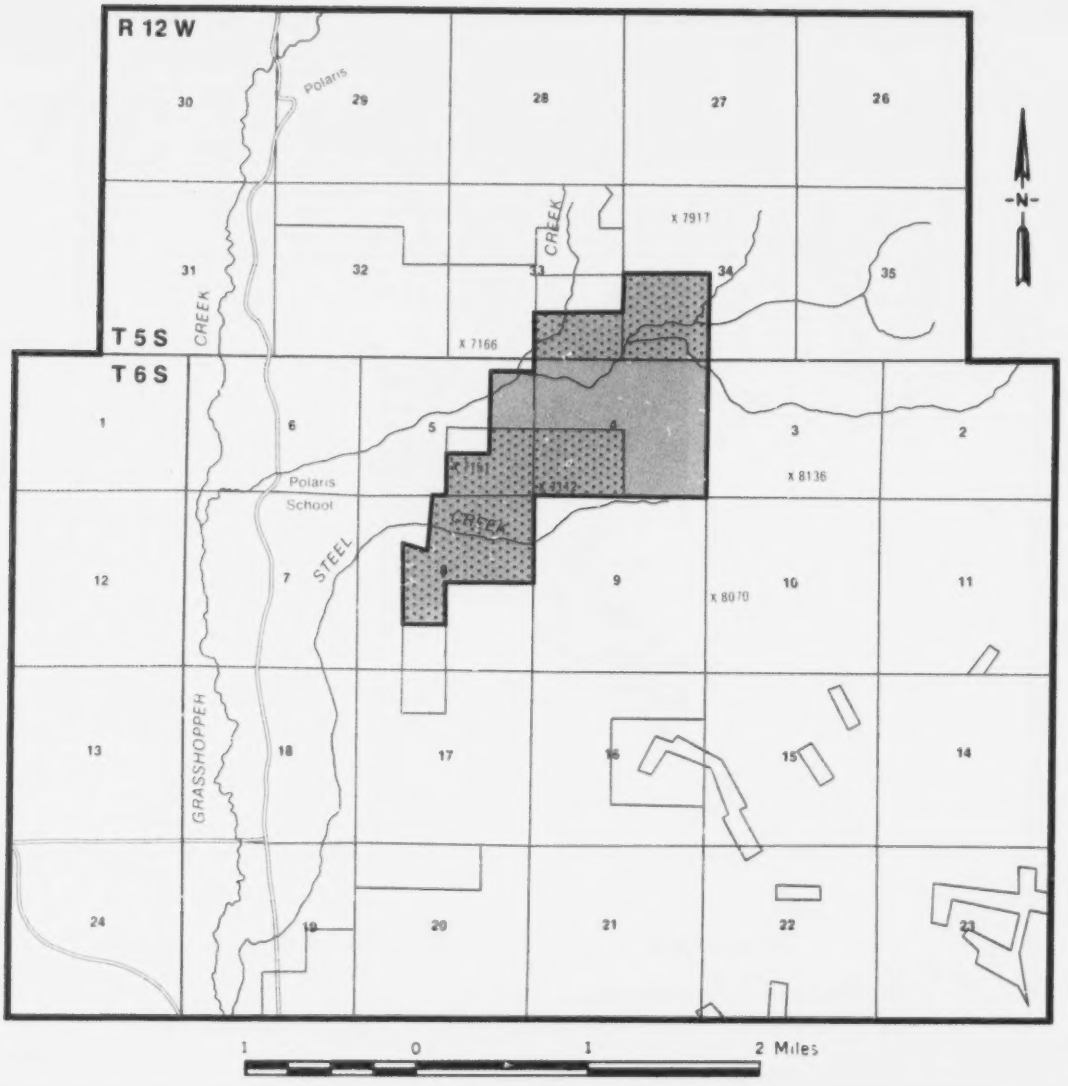
Visual Resource Management Classes

- **Class III — Partial Retention of Landscape Characteristics (no dominant changes allowed)**

- **Paved Road**
- **WSA Boundary**

FARLIN CREEK WSA
GENERAL GEOLOGIC MAP OF THE POLARIS AREA

Ts	Tertiary Sediments		Wilderness Study Area
Tkb	Tertiary Granitics of the Boulder Batholith		
Mu	Missippian Undif.		1:63,360
Pu	Permian Undif.		
Du	Devonian Undif.		
Cu	Cambrian Undif.		



FARLIN CREEK
MT-076-034

Paved Road

WSA Boundary

MINING CLAIMS AND MINERAL LEASES

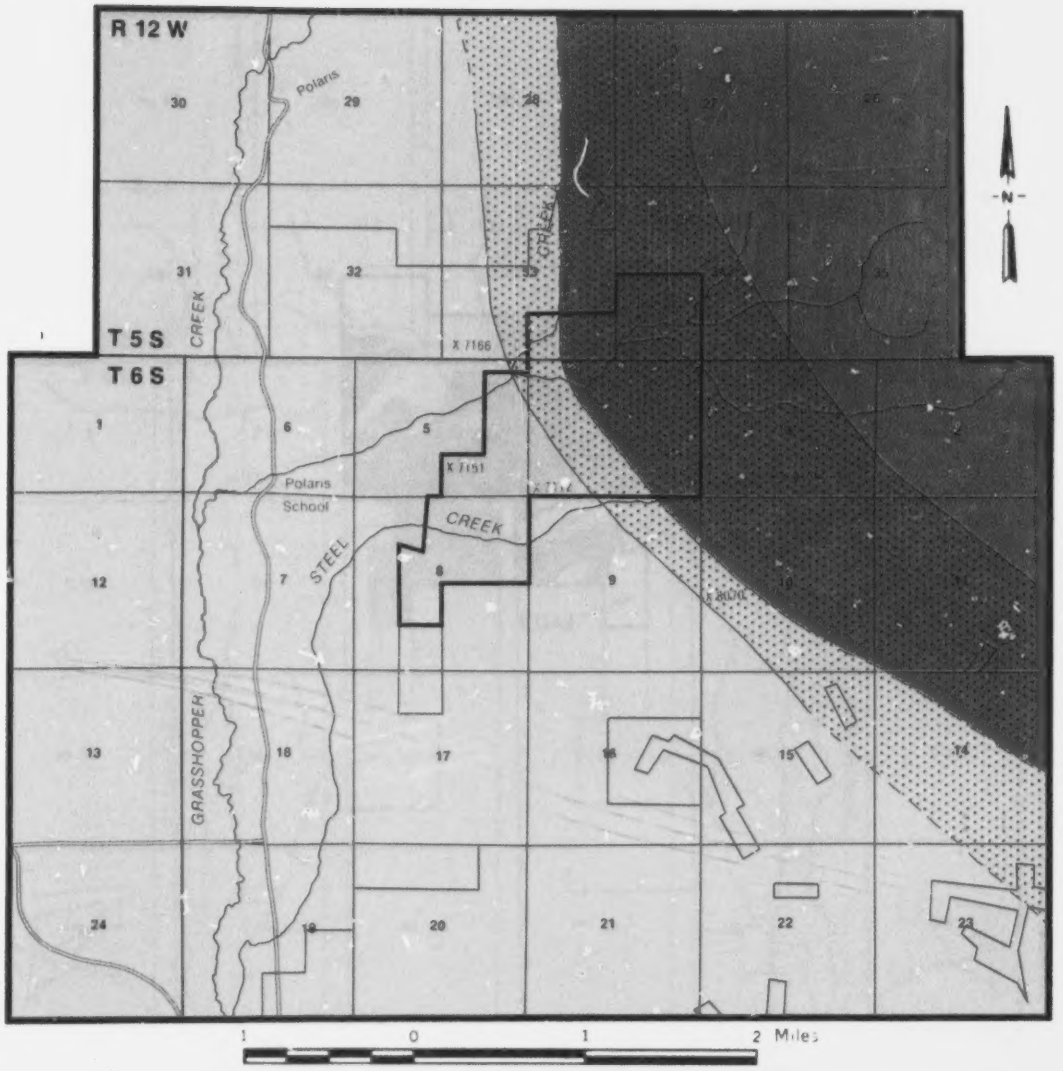
Oil and Gas Leases

Post FLPMA Leases*

(NONE) Pre FLPMA Leases

Mining Claims

***Includes lease applications and leases in simultaneous lottery**



FARLIN CREEK
MT-076-034

Paved Road

WSA Boundary

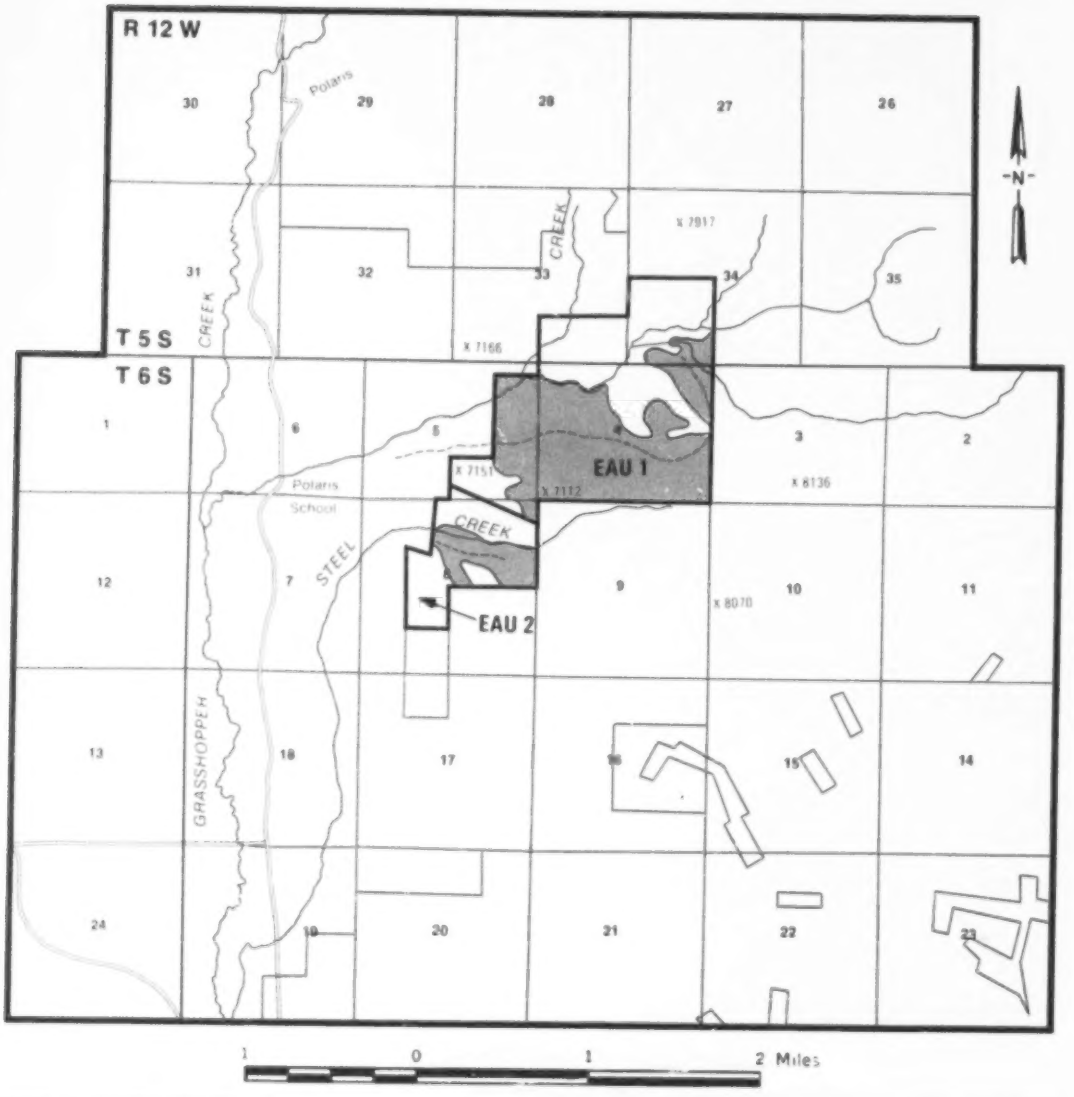
MINERAL POTENTIAL

Geology

Paleozoic Sediments

Intrusive

High Potential Au, Ag, and W



FARLIN CREEK
MT-076-034

Paved Road

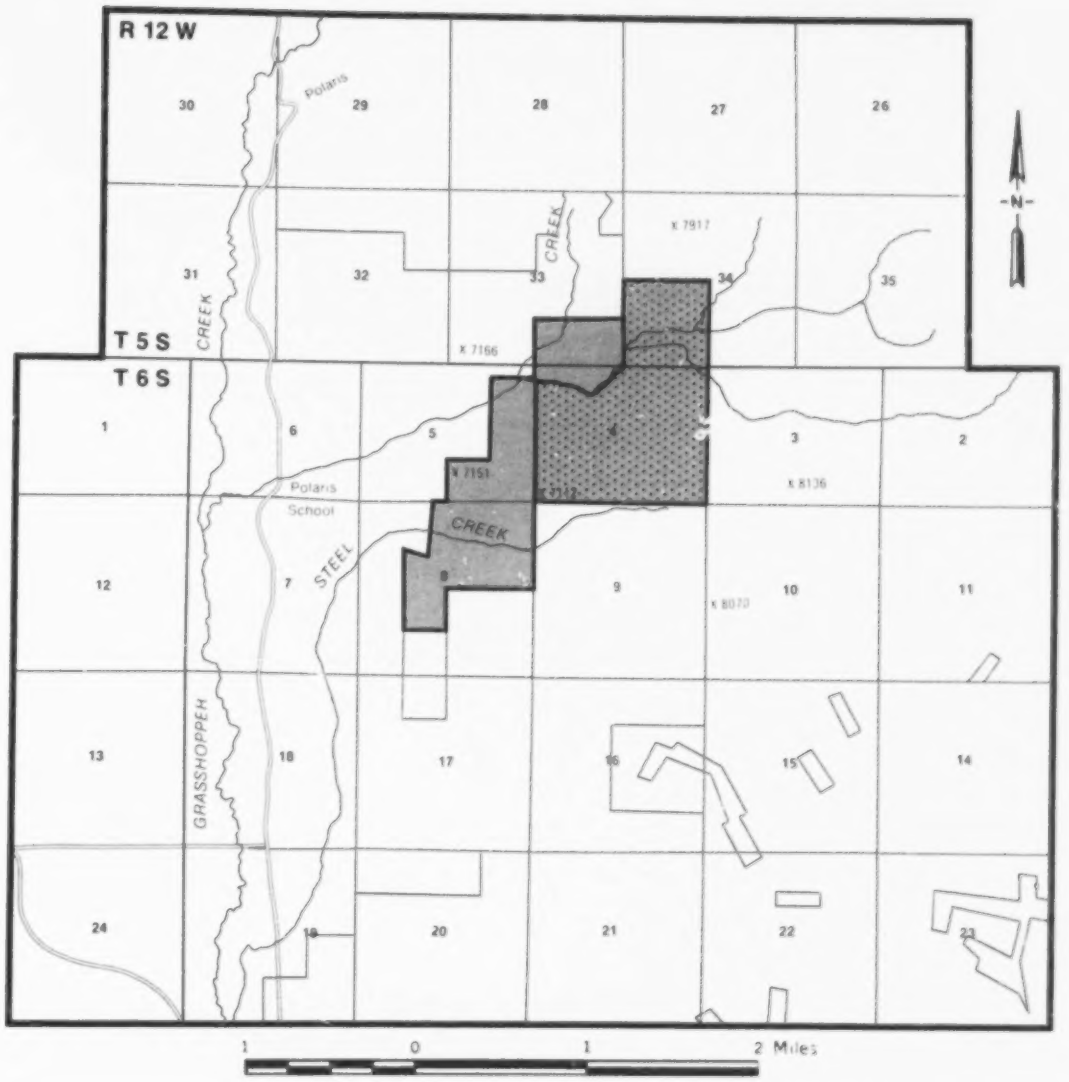
WSA Boundary

TIMBER MANAGEMENT

EAU Economic Analysis Unit

Commercial Timber

Proposed Road



FARLIN CREEK
MT-076-034

Paved Road

WSA Boundary

ALTERNATIVES

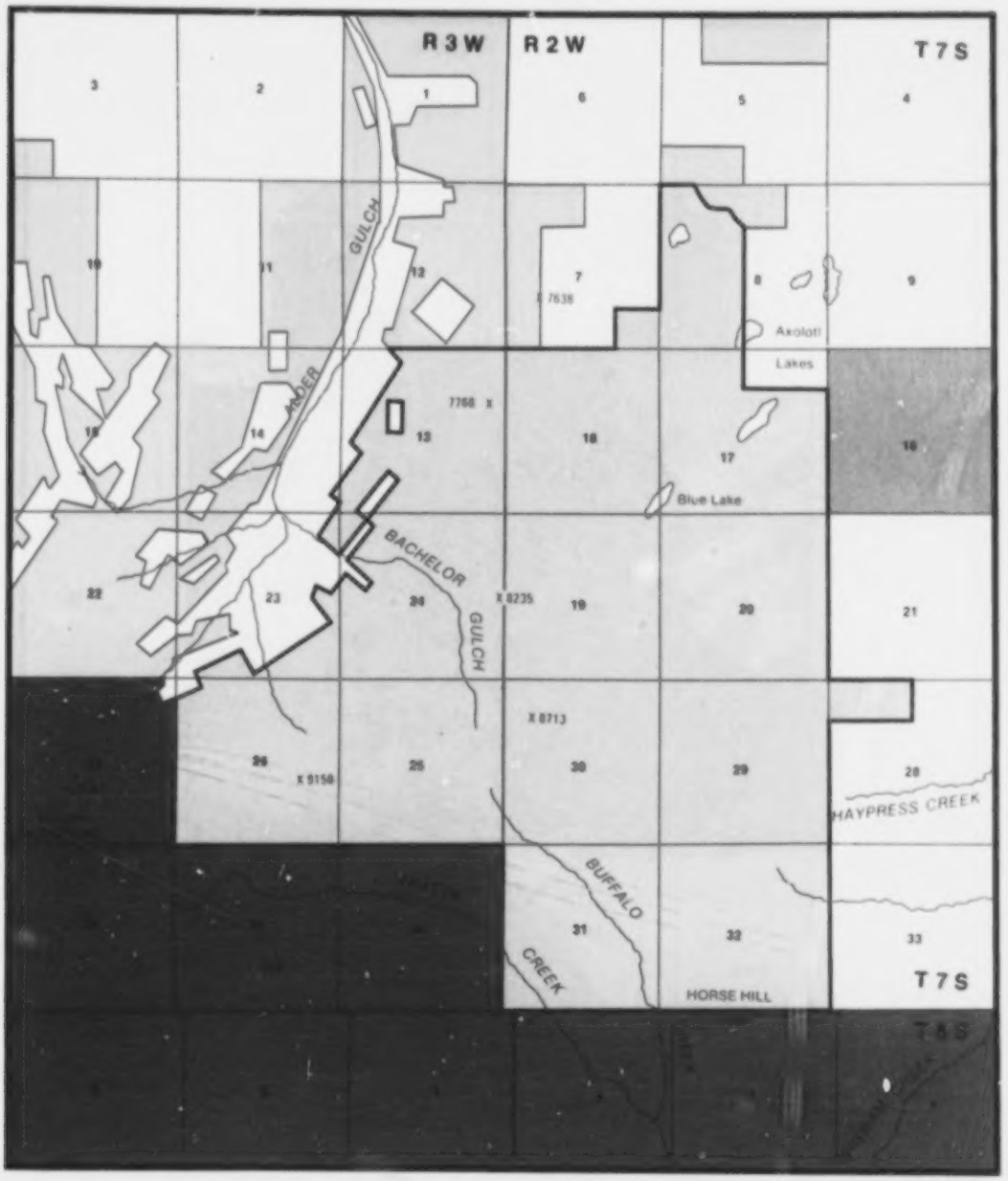
Alternative Boundary

F-1 All Wilderness

F-2 No Wilderness (no portion designated as wilderness)

F-3 Partial Wilderness

Axolotl Lakes WSA
MT-076-069



AXOLOTL LAKES
MT-076-069

LAND STATUS

N

WSA Boundary

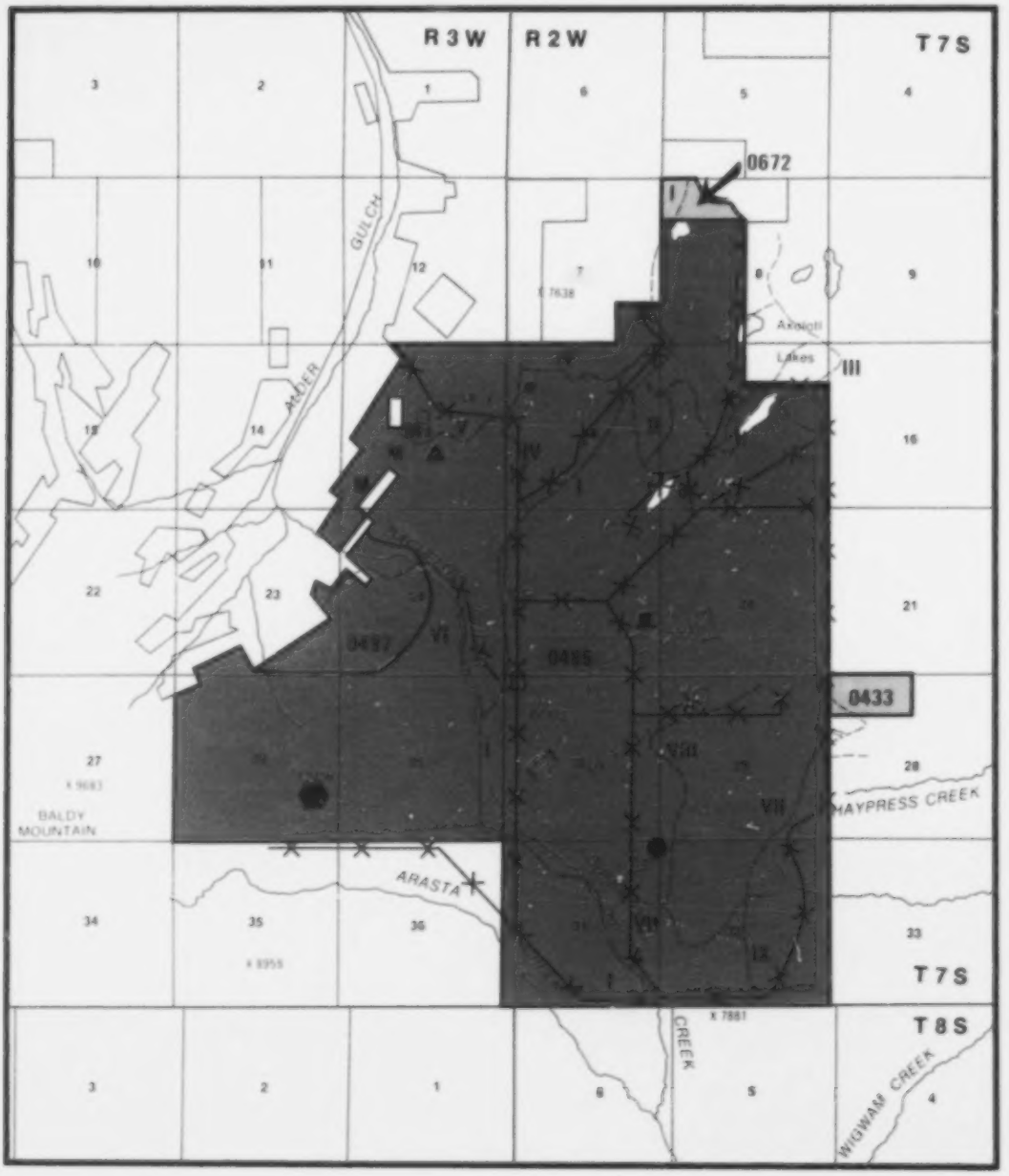
Forest Service

State

BLM

Private

1 0 1 2 Miles



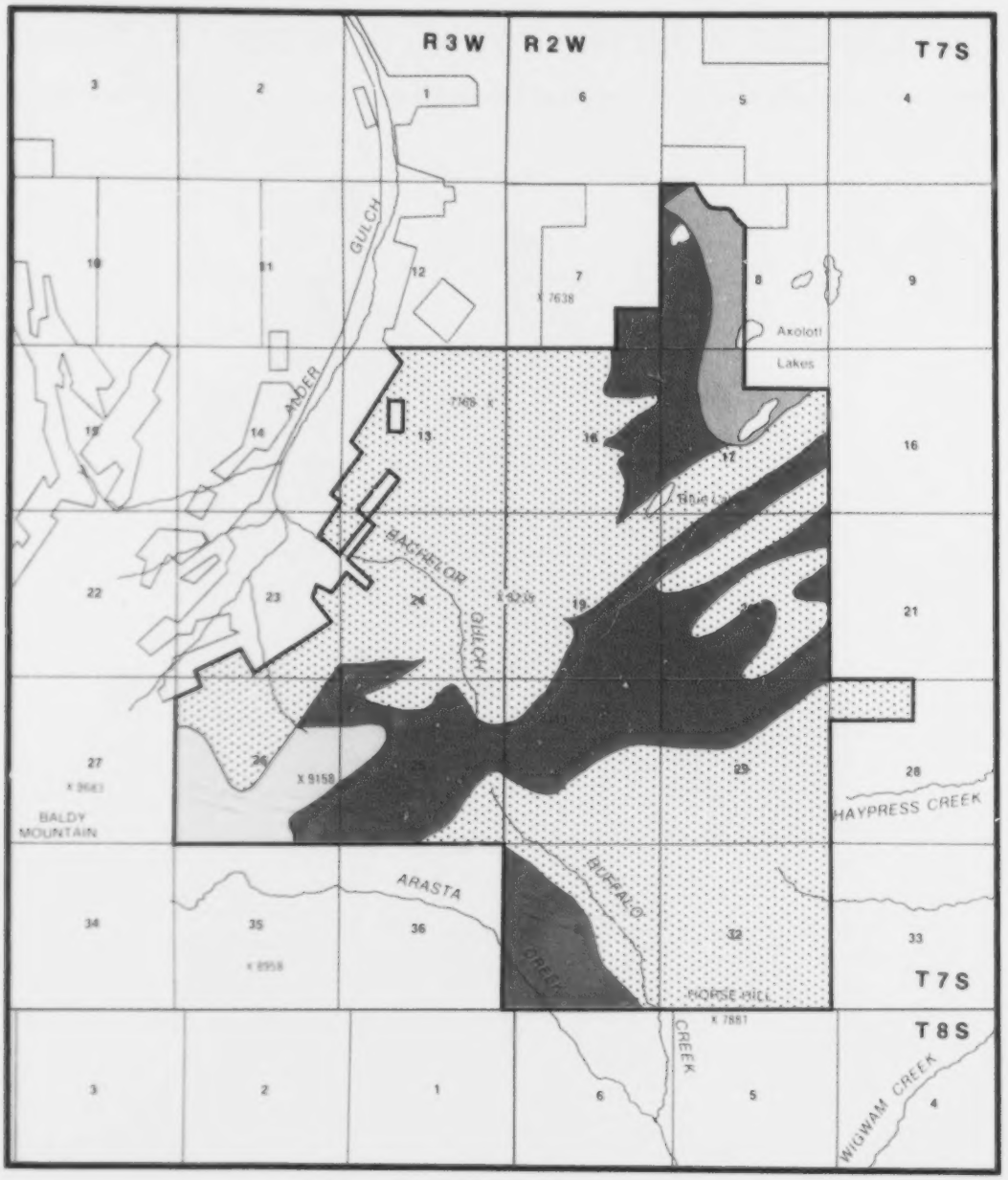
AXOLOTL LAKES
MT-076-069

DEVELOPMENT AND ALLOTMENTS

- WSA Boundary
- Proposed Allotment Management Plan
- Custodial
- Fenceline
- Proposed Fenceline
- Vehicle Way
- M Mineral Site
- Dammed Pond
- Proposed Artificial Watershed
- Proposed Pipeline
- Proposed Spring Development
- Spring Development
- Timber Cutting
- Building
- Cairns
- Repeater Station

N

1 0 1 Mile



AXOLOTL LAKES
MT-076-069

ECOTYPES
(Bailey—Kuchler System)

-N-

WSA Boundary

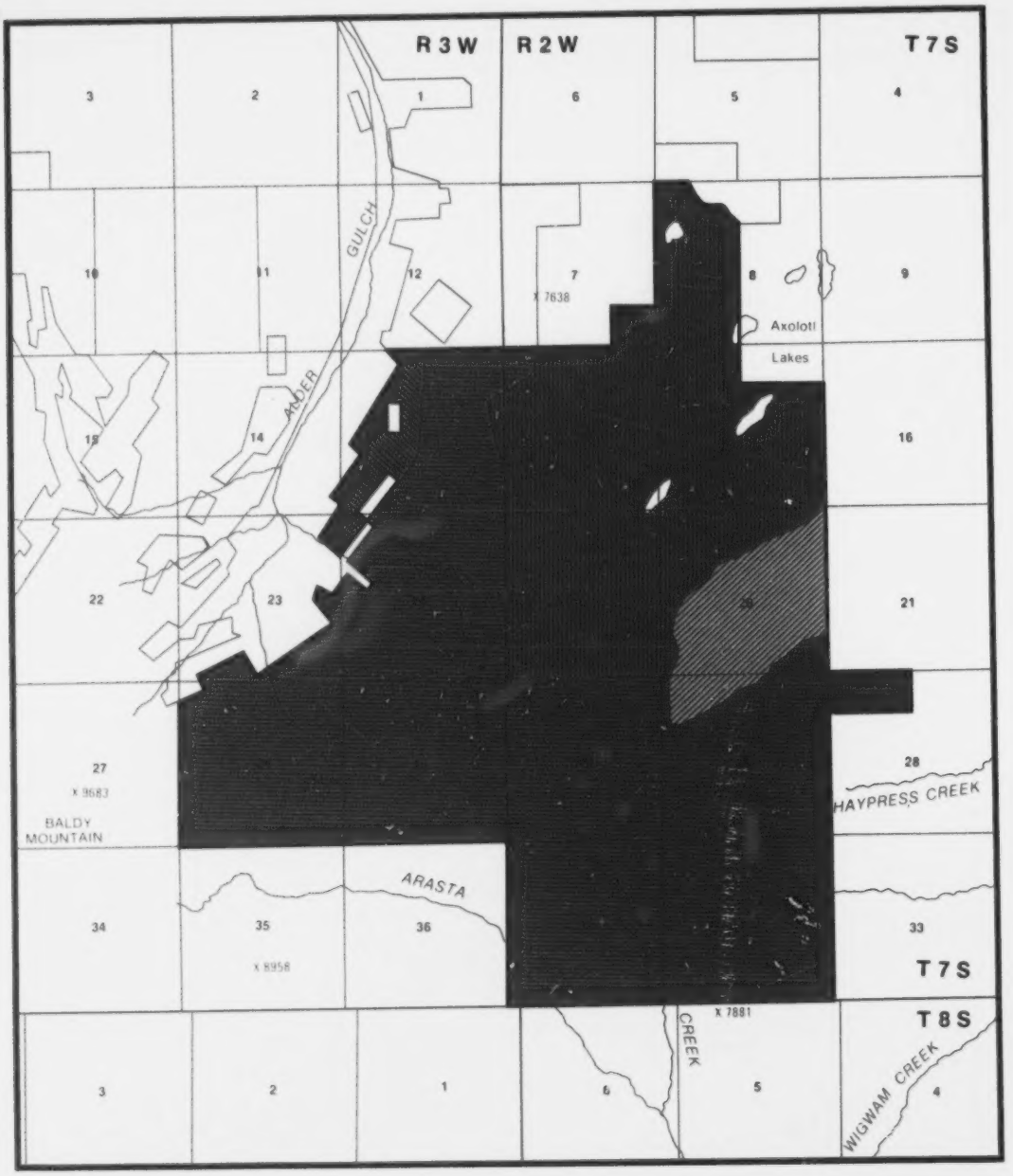
11 Douglas Fir Forest

45 Alpine Meadows and Barren

49 Sagebrush Steppe

56 Foothills, Prairie

1 0 1 2 Miles



AXOLOTL LAKES
MT-076-069

—— WSA Boundary

Scenic Quality Classes

- Class A — Outstanding Scenic Values
- Class C — Average Scenic Values

1 0 1 Mile

VISUAL RESOURCES

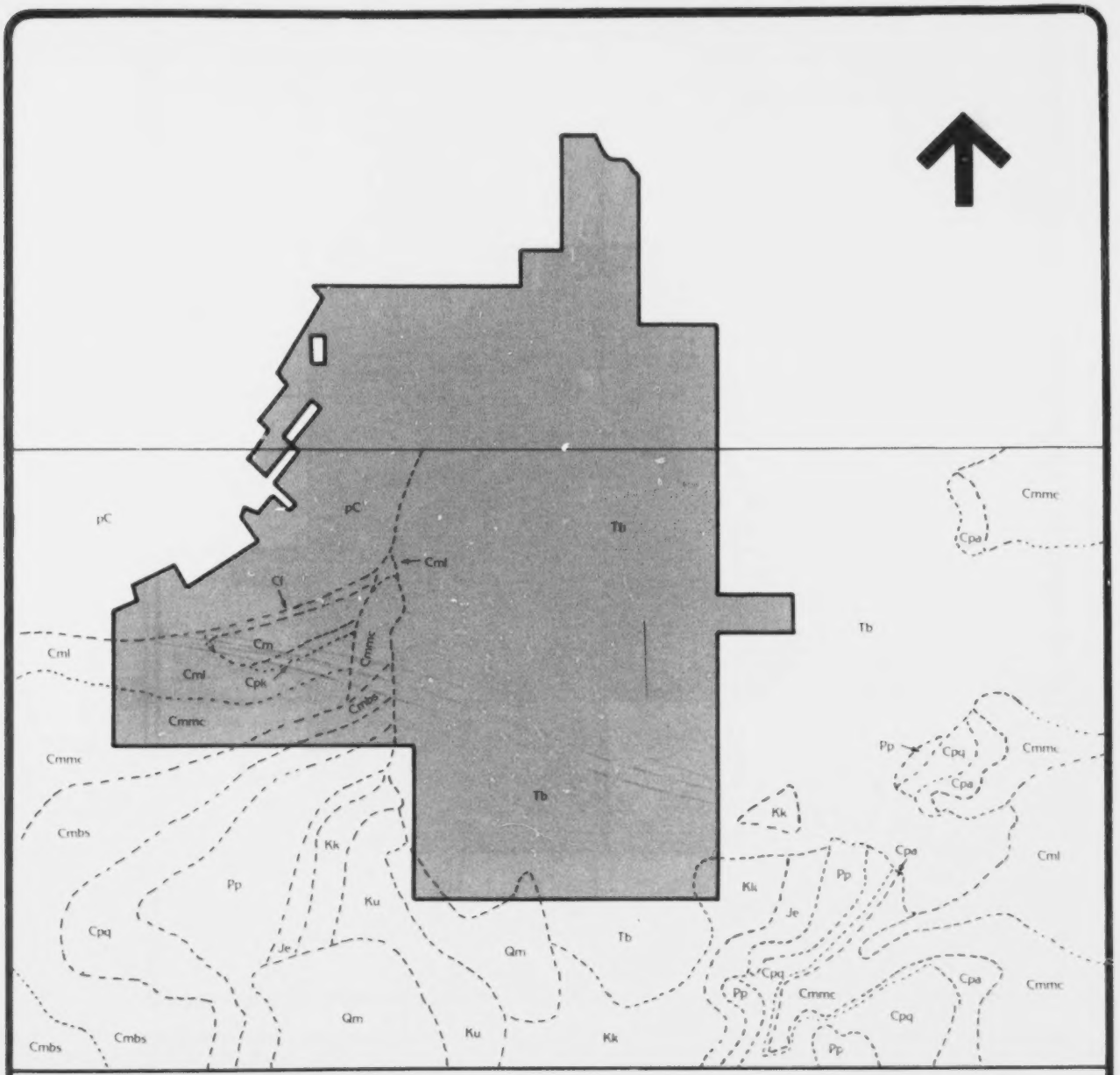
Visual Resource Management Classes

- Class II--Retention of Landscape Characteristics (no evident changes allowed)
- Class III--Partial Retention of Landscape Characteristics (no dominant changes allowed)
- Class IV-- Modification of Landscape Characteristics (dominant changes allowed)
- Class V--Rehabilitation of Landscape Characteristics (changes to improve needed)

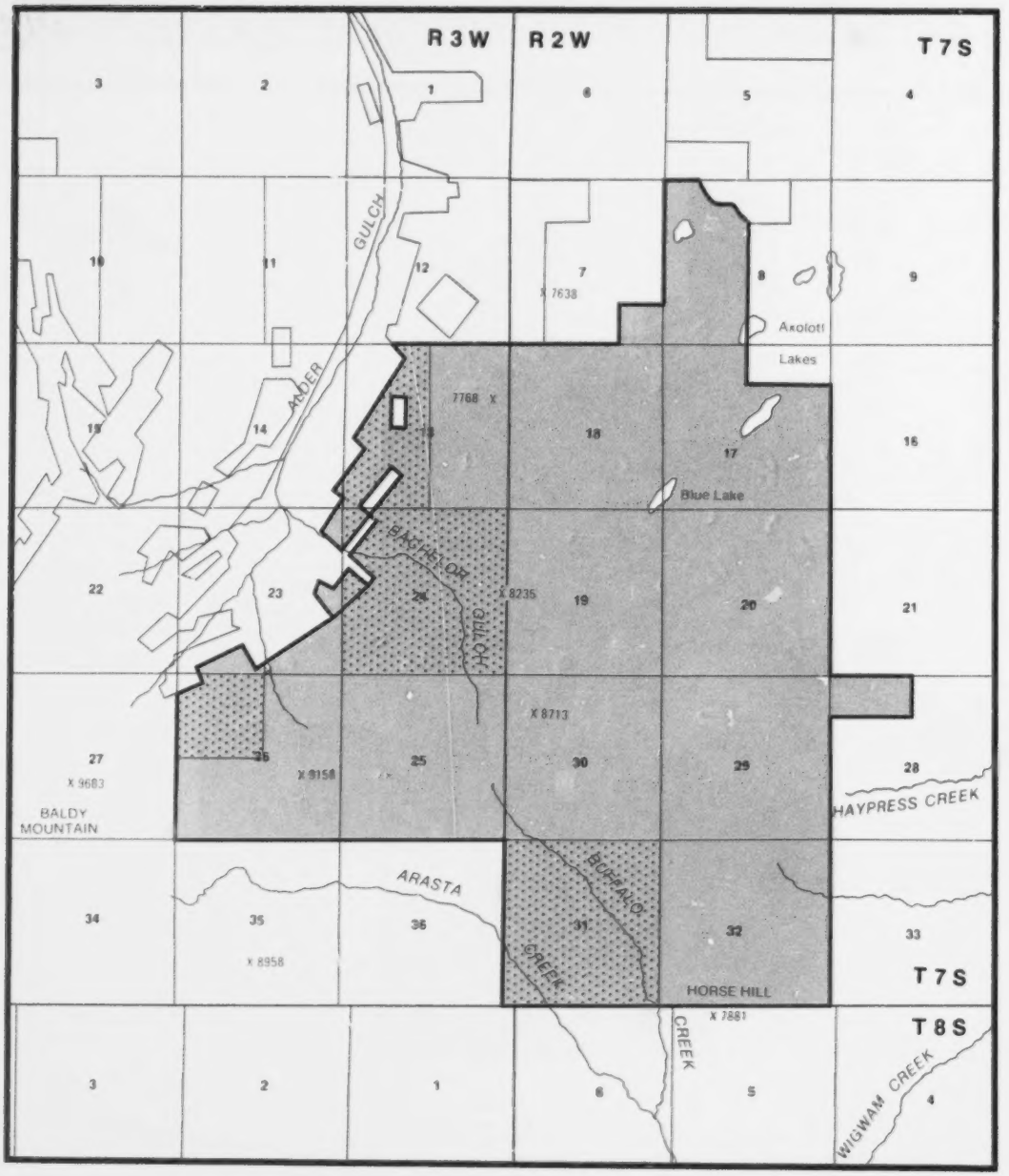
-N-

AXOLOTL LAKES WSA

GEOLOGIC MAP OF THE UPPER ALDER GULCH AREA



pC	Precambrian	Cml	Lodgepole Limestone	Je	Ellis Group
Cf	Flathead Sandstone	Cmmc	Mission Canyon Limestone	Kk	Kootenai Formation
Cw	Wolsey Shale	Cmbs	Big Snowy Group	Ku	Cretaceous-undifferentiated
Cm	Meagher Limestone	Cpa	Amsden Formation	Tb	Basalt
Cpk	Park Formation	Cpq	Quadrant Formation	Qm	Glacial Moraine
Eu	Cambrian undifferentiated	Pp	Phosphoric Formation		



AXOLOTL LAKES
MT-076-069

MINING CLAIMS AND MINERAL LEASES

WSA Boundary

Oil and Gas Leases

Post FLPMA Leases*

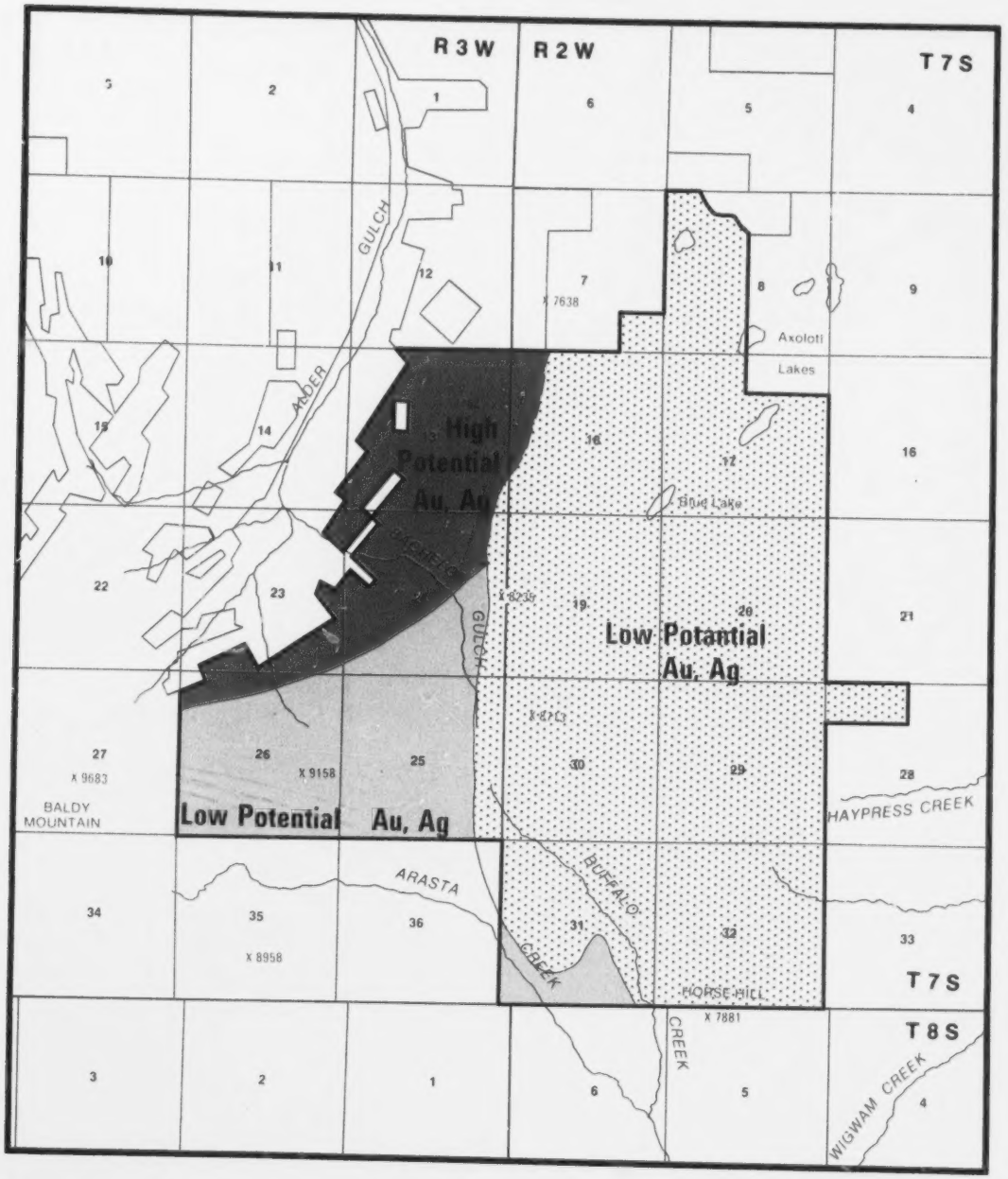
(NONE) Pre FLPMA Leases

Mining Claims

***Includes lease applications and leases in simultaneous lottery**

-N-

1 0 1 2 Miles



AXOLOTL LAKES
MT-076-069

MINERAL POTENTIAL

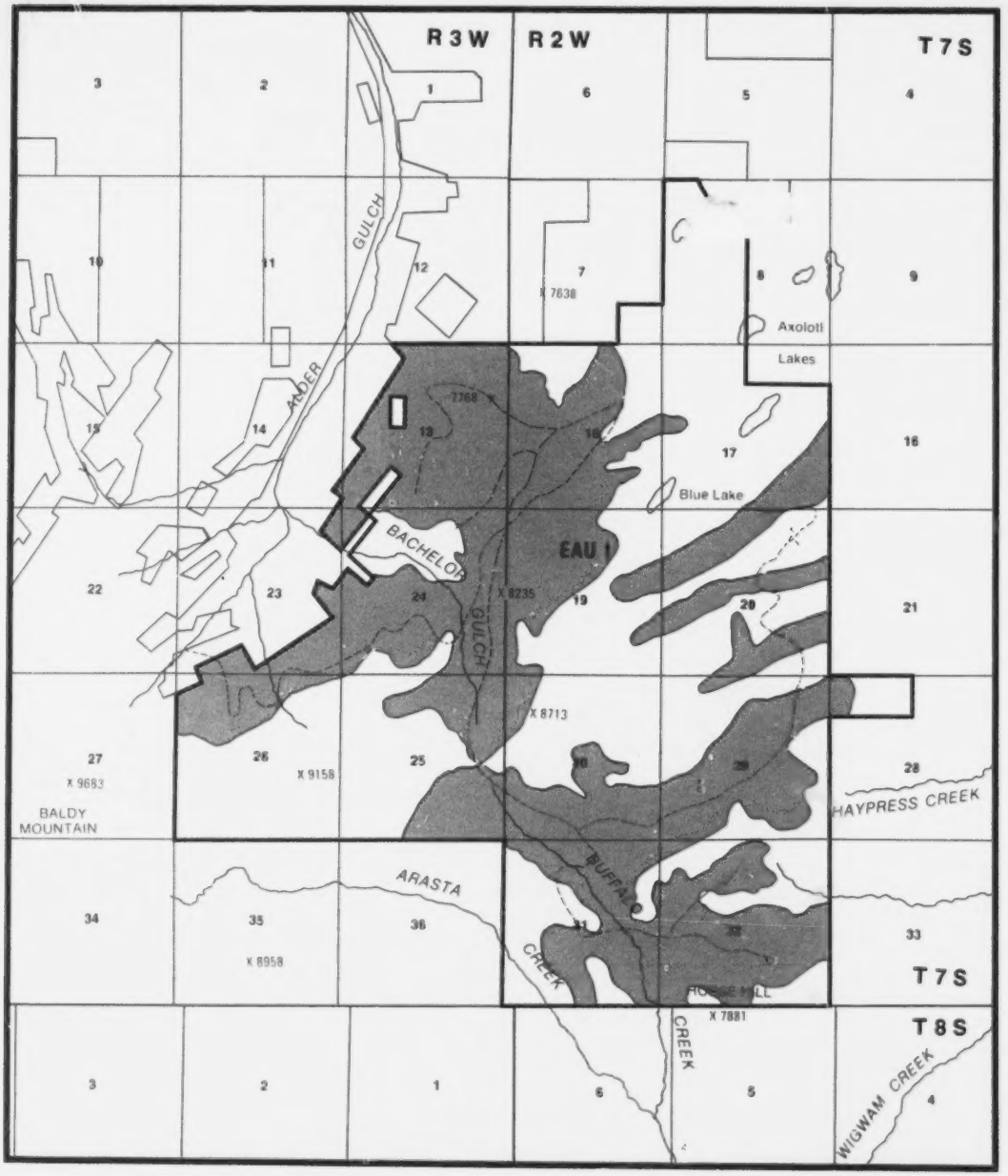
WSA Boundary

Geology

- pC Pre-Cambrian Schist and Gneiss
- Ps Paleozoic Sediments
- Tb Tertiary Bosalt

-N-

1 0 1 2 Miles



AXOLOTL LAKES
MT-076-069

TIMBER

N

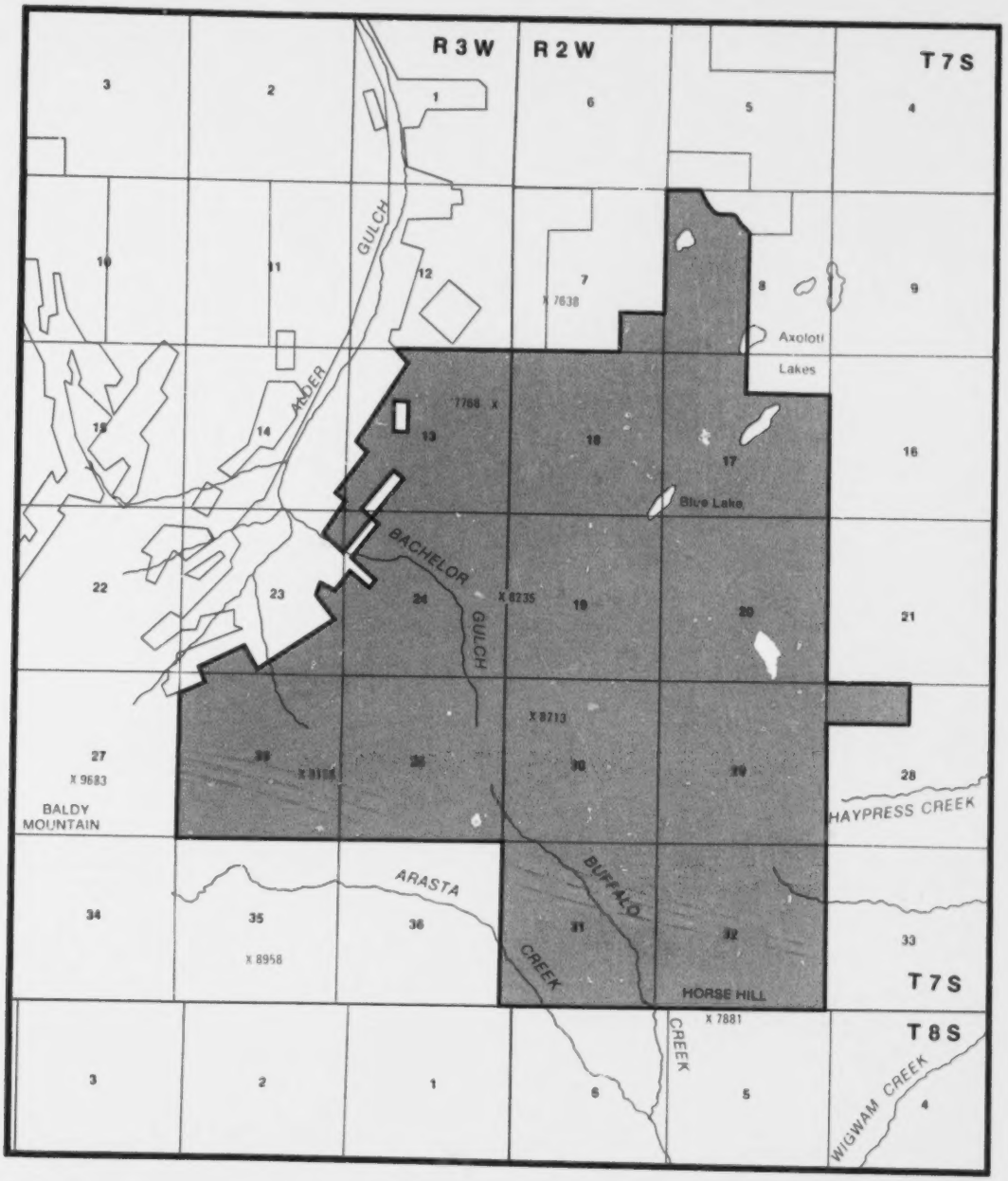
WSA Boundary

EAU Economic Analysis Unit

Proposed Roads

Commercial Timber

1 0 1 2 Miles



AXOLOTL LAKES
MT-076-069

ALTERNATIVES

-N-

WSA Boundary

AX-1 All Wilderness

AX-2 No Wilderness (no portion designated as wilderness)

1 0 1 2 3 Miles

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